Appendix H

Supplemental Groundwater Investigation Boring Logs and Well Construction Details

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 14, 2009
Borehole Diameter: 6 inch
Borehole Depth: 80 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40 feet bls

PREMIER ENVIRONMENTAL SERVICES INC

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-66

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Depth (feet)	Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
0–6	Cement Plug		moist		10,12,14			SW	SAND AND GRAVEL: brown, subangular to subrounded, poorly sorted
6–20	Bentonite Chips		moist		16,20,22			SW	SAND AND GRAVEL: brown, subangular to subrounded, poorly sorted
20–26	Bentonite Chips		moist		12,23,30			SW	SAND AND GRAVEL: brown, subangular to subrounded, poorly sorted
26–36	Bentonite Chips		moist		14,20,27			SP	SAND: brown, medium to coarse, subangular, well sorted
36–40	Bentonite Chips		moist		17,21,30			SW	SAND: brown, medium to coarse, subangular, moderate sorted; Little Gravel, subrounded
40–44	Bentonite Chips	▽	wet		50+			SP	SAND: brown, fine to medium sand, well sorted

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 14, 2009
Borehole Diameter: 6 inch
Borehole Depth: 80 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40 feet bls

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-66 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Vapor Concentration (ppm)	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips								SP	SAND: brown, fine to medium sand, well sorted
		wet		10,19,24	46			SM	SAND: brown, very fine to fine; Little Silt, well sorted
					48				
					50				@ 50-51 feet Hydropunch, wait 45 minutes, collected GW-66-1
					52				
					54				
		wet		8,23,27	56			SP	SAND: brown, very fine to medium, well sorted
					58				
					60				@ 60-61 feet Hydropunch, wait 40 minutes, collected GW-66-2
					62				
					64				
		wet		7,21,27	66			SW	SAND: brown, fine to coarse; Trace Gravel, well sorted
					68				
					70				@ 68.5-69.5 feet Hydropunch, wait 30 minutes, heaving sands, could not get to 70 feet bgs, collected GW-66-3
					72				
					74				
		wet		8,16,23	76			SP	SAND: brown, fine to medium, well sorted
					78				
					80				@ 80-81 feet Hydropunch, wait 45 minutes, collected GW-66-4
									Boring terminated at 80 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 15, 2009
Borehole Diameter: 6 inch
Borehole Depth: 80 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~42 feet bls

PREMIER ENVIRONMENTAL SERVICES INC

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-67

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Cement Plug		moist		9,10,12	6			SW	SAND AND GRAVEL: brown, fine to coarse; Little Gravel, subangular to subrounded, poorly sorted
Bentonite Chips		moist		16,18,20	10				
		moist		15,20,24	16				
		moist		5,14,19	20			SP	SAND: brown, very fine to coarse, subangular, well sorted
		moist		19,20,23	26				
		moist		15,22,22	30				
		moist		13,18,22	36			SW	SAND: brown, subangular, very fine to coarse; Trace Gravel, subangular, well sorted
	▽	wet		18,23,25	40			ML	SILT: brown; Little Clay; Some Sand, very fine to fine, low plasticity

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 15, 2009
Borehole Diameter: 6 inch
Borehole Depth: 80 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~42 feet bls

PREMIER

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-67 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Vapor Concentration (ppm)	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		wet		10,16,20	46			ML	SILT: brown; Some Sand, very fine to fine, well sorted
					48				
					50				@ 50-51 feet Hydropunch, wait 84 minutes, only about 100 ml of water, go to 55 feet and try again, screen had fine sand and silt on it
					52				
					54				
					56				@ 55-56 feet wait 47 minutes, collected GW-67-1
					58				
		wet		5,8,7	60			SP	SAND: brown, very fine to fine, well sorted
					62				@ 62-63 feet Hydropunch, wait 45 minutes, collected GW-67-2
					64				
					66				
		wet		13,19,30	68				
					70				@ 70-71 feet Hydropunch, wait 30 minutes, collected GW-67-3
					72				
					74				
		wet		4,10,24	76			SW	GRAVEL: brown, fine to medium, subrounded; Some Sand, medium to coarse, subangular, well sorted
					78				@ 79-80 feet Hydropunch, wait 47 minutes, collected GW-66-4, collected duplicate 1 at this depth
					80				Boring terminated at 80 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 15 & 16, 2009
Borehole Diameter: 6 inch
Borehole Depth: 75 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~38 feet bls

PREMIER ENVIRONMENTAL SERVICES, INC

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-68

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Cement Plug		moist		12,18,22	6			SW	SAND AND GRAVEL: brown; Trace Cobbles, subangular to subrounded, moderately sorted
Bentonite Chips		moist		27, 55+	10				same as above, except some Cobbles
		moist		15,17,20	16				
		moist		10,11,13	20			SP	SAND: brown, fine to coarse; Trace Gravel, subangular, well sorted
		moist		15,19,24	26				
		moist		13,16,24	30				
	▽	moist		15,19,20	36				
		wet		19,27,34	40			SW	SAND AND GRAVEL: brown, medium to very coarse Sand, fine to medium Gravel, subangular to subrounded, moderately sorted

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 15 & 16, 2009
Borehole Diameter: 6 inch
Borehole Depth: 75 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~38 feet bls

PREMIER

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-68 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Vapor Concentration (ppm)	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips					46			SW	@ 45 feet Hydropunch, wait 35 minutes, collected GW-68-1
					48				
					50				
		wet		13,17,17	52			ML	SILT: brown; Trace Clay, low plasticity; Trace Sand, very fine, soft
					54				
					56				@ 55-56 feet Hydropunch, wait 52 minutes, collected GW-68-2
					58				
					60				
		wet		50+	62			SP	SAND: brown, fine to medium, subangular, well sorted
					64				@ 65 feet Hydropunch, wait 30 minutes, collected GW-68-3
					66				
					68				
					70				
		wet		50+	72				
					74				@ 75 feet Hydropunch, wait 40 minutes, collected GW-68-4
									Boring terminated at 75 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 16 & 17, 2009
Borehole Diameter: 6 inch
Borehole Depth: 75 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~37 feet bls

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Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-69

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Cement Plug		moist		7,10,11	6			SW	SAND AND GRAVEL: brown, fine to coarse Sand; Trace Gravel, fine to coarse, subangular to subrounded, moderately sorted
Bentonite Chips		moist		18,20,21	10				
		moist		15,17,26	16				same as above, except little Gravel
		moist		13,20,20	20				trace Gravel, coarse, subrounded
		moist		17,22,26	26			SP	SAND: brown, fine to coarse, subangular, well sorted
		moist		17,24,32	30				same as above except little Gravel, fine to coarse, subrounded
	▽	moist		13,21,27	36			SW	SAND: brown, fine to coarse, subangular; Some Gravel, fine to coarse, subrounded, moderately sorted
		wet		50+	40			SP	SAND: brown, fine to coarse; Medium Cobble blocked end of split spoon

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 16 & 17, 2009
Borehole Diameter: 6 inch
Borehole Depth: 75 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~37 feet bls

PREMIER ENVIRONMENTAL SERVICES, INC

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-69 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion	Water Level	Moisture Content	Vapor Concentration (ppm)	Blow Counts	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Backfill					46				@ 45-46 feet Hydropunch, left overnight 900 minutes, collected GW-69-1
					48				
		wet		19,50+	50			SP	SAND: brown, fine to medium, subangular, well sorted
					52				
					54				
					56				@ 55-56 feet Hydropunch, wait 62 minutes, collected GW-69-2
					58				
Bentonite Chips		wet		18,21,25	60			SW	GRAVEL: brown, fine to medium, subangular; Some Sand, fine to coarse, subangular, well sorted
					62				
					64				
					66				@ 65-66 feet Hydropunch, wait 35 minutes, collected GW-69-3
					68				
				3,5,7	70				@70-71.5 no recovery
					72				
					74				@ 75-76 feet Hydropunch, wait 35 minutes, collected GW-69-4
									Boring terminated at 75 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 17, 2009
Borehole Diameter: 6 inch
Borehole Depth: 75 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~38 feet bls

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-70

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Cement Plug		moist		7,13,14	6			SW	SAND: brown, fine to coarse, subangular; Little Gravel, fine to coarse, subrounded
Bentonite Chips		moist		20,21,22	10				same as above, trace Cobbles
		moist		14,18,19	16				
		moist		35,50+	20				tip blocked by cobbles
		moist		32,50+	26				
		moist		21,32,38	30				moderately sorted
		moist		50+	36				little Cobbles, rounded
	▽								
		wet		16,19,20	40			ML	SILT: brown; Little Clay, low plasticity, moist, stiff

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 17, 2009
Borehole Diameter: 6 inch
Borehole Depth: 75 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~38 feet bls

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-70 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion: Backfill	Water Level	Moisture Content	Vapor Concentration (ppm)	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips					46			ML	SILT: brown; Trace Clay, low plasticity, moist, stiff @ 45-46 feet Hydropunch, wait 35 minutes, collected GW-70-1
		wet		18,17,22	48				
					50			SP	SAND: brown, very fine to fine, subangular, well sorted
					52				
					54				@ 55-56 feet Hydropunch, wait 52 minutes, collected GW-70-2
					56				
					58				
		wet		5,7,6	60			SW	SAND: brown, fine to very coarse, subangular; Trace Gravel, fine, well sorted
					62				
					64				@ 65-66 feet Hydropunch, wait 90 minutes, collected GW-70-3
					66				
					68				
		wet		3,7,10	70			SP	SAND: brown, very fine to fine, subangular, well sorted
					72				
					74				@ 75-76 feet Hydropunch, wait 40 minutes, collected GW-70-4
									Boring terminated at 75 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 17 & 19, 2009
Borehole Diameter: 6 inch
Borehole Depth: 85 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~42 feet bls

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Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-71

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Cement Plug		moist		10,12,13	6			SW	SAND: brown, fine to coarse, subangular, moderately sorted; Trace Gravel, fine to medium, rounded
Bentonite Chips		moist		8,13,15	10				same as above, trace Cobbles
		moist		16,18,21	16				
		moist		14,17,17	20				no cobbles
		moist		14,20,21	26				
		moist		15,22,24	30			ML	SILT: brown; Little Clay, low plasticity, medium stiff
		moist		17,20,23	36			SP	SAND: brown, very fine to fine, subangular, well sorted
	▽	very moist		13,15,21	40				

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 17 & 19, 2009
Borehole Diameter: 6 inch
Borehole Depth: 85 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~42 feet bls

PREMIER

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-71 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Vapor Concentration (ppm)	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		very moist		7,11,15	46			SP	SAND: brown, very fine to fine, subangular, well sorted
					48				
		wet		9,13,18	50			SW	SAND: brown, fine to very coarse; Trace Gravel, fine, subangular, well sorted
					52				
					54				
					56				@ 55-56 feet Hydropunch, first wait 30-40 minutes, second 25-45 minutes (sample twice to get enough water), collected GW-71-1
					58				
		wet		19,50+	60				
					62				
					64				
					66				@ 65-66 feet Hydropunch, wait 45 minutes, collected GW-71-2
					68				
		wet			70			SP	SAND: brown, very fine to medium, subangular, well sorted
					72				
					74				
					76				@ 75-76 feet Hydropunch, wait 45 minutes, collected GW-71-3
					78				
		wet		3,5,10	80				
					82				
					84				@ 85-86 feet Hydropunch, wait 45 minutes, collected GW-71-4
									Boring terminated at 85 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 22 & 23 2009
Borehole Diameter: 6 inch
Borehole Depth: 85 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~42 feet bls

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-72

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Cement Plug		moist		11,14,18	6			SW	SAND: brown, fine to coarse, subangular; Some Gravel, fine to coarse, subrounded, poorly sorted
Bentonite Chips		moist		15,16,20	10				same as above, trace Cobbles
		moist		8,15,19	16				silt layer in middle
		moist		10,18,19	20				Sand: brown, fine to coarse, subangular, soft, non plasticity; Trace Gravel, fine to medium, subrounded; Trace Cobbles, poorly sorted
		moist		17,21,23	26			SP	SAND: brown, fine to medium, subangular
		moist		17,26,30	30				
		moist		14,18,25	36				very fine to fine Sand
	▽	very moist		12,13,18	40			SM-ML	SAND AND SILT: brown, very fine to fine; Silt in middle of sample; Trace Clay, medium stiff, very low plasticity

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 22 & 23 2009
Borehole Diameter: 6 inch
Borehole Depth: 85 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~42 feet bls

PREMIER

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-72 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Vapor Concentration (ppm)	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		wet		8,13,17	46			SM-ML	
								SP	SAND: brown, very fine to fine, well sorted
					48				
		wet		10,15,15	50				
					52				
					54				
			X						@ 55-56 feet Hydropunch, leave overnight (up to 17 hours), collected GW-72-1
					56				
					58				
		wet		7,10,16	60			SW	SAND AND GRAVEL: brown, fine to medium, subrounded, moderately sorted
					62				
					64				
			X						@ 65-66 feet Hydropunch, wait 35 minutes, collected GW-72-2
					66				
					68				
		wet		50+	70			SP	SAND: brown, very fine to coarse, subangular, moderately sorted
					72				
					74				
			X						@ 74-75 feet Hydropunch, wait 35 minutes, collected GW-72-3
					76				
					78				
		wet		9,10,15	80				
					82				
					84				
			X						@ 85-86 feet Hydropunch, wait 30 minutes, collected GW-72-4
									Boring terminated at 85 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 21 & 22 2009
Borehole Diameter: 6 inch
Borehole Depth: 85 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~42 feet bls

PREMIER ENVIRONMENTAL SERVICES INC

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-73

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Cement Plug					2			SW	SAND AND GRAVEL: brown, fine to coarse, subangular to subrounded; Trace Cobbles, poorly sorted
		moist		10,13,21	4				
					6				
					8				
		moist		13,15,16	10				no Cobbles, moderately sorted
					12				
					14				
		moist		16,20,25	16				
					18				
Bentonite Chips					20				
		moist		12,21,30	22				trace Gravel; subrounded, moderately sorted
					24				
		moist		19,20,25	26				SAND: fine to very coarse; Trace Gravel, fine, well sorted
					28				
		moist		10,17,21	30			SP	SAND: brown, very fine to fine, moderately sorted
					32				
					34				
		moist		15,19,23	36				
					38				
	▽	moist		11,18,20	40				
					42				
					44				

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 21 & 22 2009
Borehole Diameter: 6 inch
Borehole Depth: 85 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~42 feet bls

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-73 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Vapor Concentration (ppm)	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		wet		9,15,18	46			SP	SAND: brown, very fine to fine, moderately sorted
					48				
		wet		7,11,14	50				
					52				
					54				
			X		56				@ 55-56 feet Hydropunch, wait 12 hours, collected GW-73-1
					58				
		wet		50+	60				well sorted
					62				
					64				
			X		66				@ 65-66 feet Hydropunch, wait 35 minutes, collected GW-73-2
					68				
		wet		50+	70				
					72				
					74				
			X		76				@ 75-76 feet Hydropunch, wait 20 minutes, collected GW-73-3
					78				
		wet		50+	80				refusal
					82				
					84				@ 85-86 feet Hydropunch, wait 35 minutes, collected GW-73-4
			X						Boring terminated at 85 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 19 & 21, 2009
Borehole Diameter: 6 inch
Borehole Depth: 85 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~42 feet bls

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-74

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Cement Plug		moist		11,11,13	6			SW	SAND: brown, fine to coarse, subangular; Little Gravel, fine to coarse, subrounded
Bentonite Chips		moist		13,12,11	10				trace Cobbles, subrounded
		moist		15,17,18	16				
		moist		18,20,26	20				SAND: fine to medium, subangular, well sorted; Trace Gravel, fine to medium, subrounded
		moist		21,26,29	26				same as above, except one cobble in sample
		moist		15,18,18	30			SM-ML	SAND: @first 0.6', brown, very fine to medium, subangular, well sorted; @last 0.3' Silt: Trace Clay, medium stiff, low plasticity
		moist		11,16,19	36				SILT: brown; Trace Clay, medium stiff, low plasticity
	▽	very moist		16,20,23	42			SP	SAND: brown, very fine to fine, subangular, well sorted

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: December 19 & 21, 2009
Borehole Diameter: 6 inch
Borehole Depth: 85 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~42 feet bls

PREMIER

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 209066.00 Task 2

Boring SB-74 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Vapor Concentration (ppm)	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		very moist		10,17,20	46			SP	SAND: brown, very fine to fine, subangular, well sorted
					48				
		very moist		21,50+	50				
					52				
					54				
					56				@ 55-56 feet Hydropunch, 41 hours (duplicate sample from 14:30 PM 12-19 to 12-21), collected GW-74-1 and GW-74-5
					58				
		wet		4,10,21	60			SW	SAND AND GRAVEL: brown, subangular, very fine to medium, moderated to well sorted; Trace Gravel, fine to medium, subrounded, poorly sorted
					62				
					64				@ 65-66 feet Hydropunch, wait 100 minutes, collected GW-74-2
					66				
					68				
		wet		9,13,20	70			SP	SAND: brown, very fine to fine, subangular, well sorted
					72				
					74				@ 75-76 feet Hydropunch, wait 30 minutes, collected GW-74-3
					76				
					78				
		wet		5,9,12	80				
					82				
					84				@ 85-86 feet Hydropunch, wait 30 minutes, collected GW-74-4
									Boring terminated at 85 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: June 29 & 30, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: n/a

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-75

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		moist		4,8,12	52			SW	SAND: brown, fine to medium, subangular, well sorted; Trace Gravel, fine, subrounded, saturated
					54				
		moist		6,10,15	56				@55'-56': SAND: brown, very fine, saturated, well sorted @56.5': same as 50'-51.5'
					58				
			X		60				collected GW-75-1
					62				
					64				
		moist		6,7,8	66			SP	SAND: brown, very fine to fine, subrounded, saturated, well sorted
					68				
			X		70				collected GW-75-2
					72				
					74				
		moist		8,10,15	76				same as above
					78				
			X		80				collected GW-75-3
					82				
					84				
		moist		12,16,18	86			SW	SAND: brown, fine to medium, subangular, well sorted; Trace Gravel, fine, subrounded, saturated
					88				
					90				
					92				
					94				

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: June 29 & 30, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: n/a

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-75 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		very moist		50+	96			SP	SAND: brown, very fine to fine, subangular, saturated, well sorted
					98				
			X		100				collected GW-75-4
									Boring terminated at 100 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: June 30 & July 1, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: n/a

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-76

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
									See Boring Log MW-31 for soil description from 0-50 ft bgs
Backfill		moist		5,13,15	52			SP	SAND: brown, very fine to fine, subangular, saturated, well sorted
					54				
		moist		10,13,14	56				same as above
					58				
			X		60				collected GW-76-1
					62				
					64				
		moist			66			SW	SAND: brown, fine to medium, subangular, saturated, well sorted; last 0.4' - Trace Gravel, fine, subrounded, moderately sorted
					68				
			X		70				collected GW-76-2
					72				
					74				
		moist		12,18,20	76			SP	SAND: brown, very fine to fine, subangular, saturated, well sorted
					78				
			X		80				collected GW-76-3
					82				
					84				
		moist		6,18,25	86				same as above
					88				
			X		90				collected GW-76-4
					92				
					94				

Bentonite Chips

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: June 30 & July 1, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: n/a

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-76 (cont.)

Elevation (feet msl): ~140
Northing (feet): n/a
Easting (feet): n/a

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		very moist		11,18,22	96			SW	First 0.8' - SAND: brown, fine to medium, subangular, saturated, well sorted; Last 0.3' - GRAVEL: brown, fine to medium, subrounded, saturated, moderately sorted
					98				
			X		100				collected GW-76-5
									Boring terminated at 100 feet and backfilled with bentonite chips and capped with cement

bgs = below ground surface

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 7, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: n/a

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-78

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
									See Boring Log L-3 for soil description from 0-60 ft bgs
Bentonite Chips			X		62				collected GW-78-1
					64				
		moist		18,50+	66			SW	SAND: brown, medium to coarse, subangular, saturated, well sorted; Trace Gravel, subrounded, moderately sorted
					68				
			X		70				collected GW-78-2
					72				
					74				
		moist		10,16,21	76				SAND: brown, medium to coarse, subangular, saturated, well sorted; Last 0.3' - Gravel, very fine to fine, well sorted
					78				
			X		80				collected GW-78-3
					82				
					84				
		moist		16,20,26	86			SP	SAND: brown, fine to medium, subangular, saturated, well sorted
					88				
			X		90				collected GW-78-4
					92				
					94				
		moist		14,24,30	96			GP	GRAVEL: gray, medium to coarse, subrounded, saturated; matrix a mixture of medium to coarse Sand, Silt and Clay, moderately sorted
					98				
					100				Boring terminated at 100 feet and backfilled with bentonite chips and capped with cement
									bgs = below ground surface

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 9, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: n/a

PREMIER ENVIRONMENTAL SERVICES, INC

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-79

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips			X		62				collected GW-79-1
					64				
		moist		15,15,18	66			SW	SAND: brown, fine to medium, subangular, saturated, well sorted; Trace Gravel, fine, subangular
					68				
			X		70				collected GW-79-2
					72				
					74				
		moist		10,13,15	76			SP	SAND: brown, fine to medium, subrounded, saturated, well sorted
					78				
			X		80				collected GW-79-3
					82				
					84				
		moist		13,14,19	86				same as above
					88				
			X		90				collected GW-79-4
					92				
					94				
		moist		30+	96				same as above; heave in auger Some Silt/Clay on bit, likely in aquitard
					98				
					100				Boring terminated at 100 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 12, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~38 feet bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-80

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		moist		12,18,22	6			SW	SAND AND GRAVEL: brown; Trace Cobbles, subangular to subrounded, moderately sorted
		moist		27, 55+	10				same as above, except some Cobbles
		moist		15,17,20	16				
		moist		10,11,13	20			SP	SAND: brown, fine to coarse; Trace Gravel, subangular, well sorted
		moist		15,19,24	26				
		moist		13,16,24	30				
		moist		15,19,20	36				
	▽				38				
		wet		19,27,34	40			SW	SAND AND GRAVEL: brown, medium to very coarse Sand, fine to medium Gravel, subangular to subrounded, moderately sorted
					42				
					44				

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 12, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~38 feet bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-80 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips					46			SW	SAND AND GRAVEL: brown, medium to very coarse Sand, fine to medium Gravel, subangular to subrounded, moderately sorted
					48				
					50				
		wet		13,17,17	52			ML	SILT: brown; Trace Clay, low plasticity; Trace Sand, very fine, soft
					54				
					56				
					58				
			X		60				collected GW-80-1
					62				
					64				
					66				
					68				
			X		70				collected GW-80-2
					72				
					74				
					76				
					78				
			X		80				collected GW-80-3
					82				
					84				
		moist		7,12,12	86			SW	SAND: brown, fine to coarse; Trace Gravel and Trace Silt, loose, wet, no odor, no sheen
					88				

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 12, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~38 feet bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-80 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		moist		9,17,17	90			SW	SAND: brown, fine to coarse; Trace Gravel and Trace Silt, loose, wet, no odor, no sheen
					92				collected GW-80-4
					94				
					96				same as above
					98				
					100				collected GW-80-5
									Boring terminated at 100 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 26, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40 feet bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-81

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Backfill: Bentonite Chips					2				Grass, soil surface
		damp		50 for 6"	6			SM	SILTY SAND: brown, fine to coarse; Trace Roots, medium dense, no odor, no sheen
		damp		20,22,27	10				SILTY SAND: brown, fine to medium; Trace Roots, medium dense, no odor, no sheen
		damp		22,27,28	16				SAND: brown to gray, fine to medium; Some Silt and coarse Sand, medium dense, no odor, no sheen
		moist		50 for 6"	20			SP	SANDY with Some Silt: browish gray, fine to coarse, medium dense, no odor, no sheen, trace rocks
		moist		50 for 6"	26				same as above
		moist		20,20,22	30				SAND: brownish gray, fine to medium; Trace Silt, Trace Clay, well graded, medium dense, no odor, no sheen
		moist		26,28,54	36				same as above with silt
	▽	wet		12,12,15	40				same as above

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 26, 2010
Borehole Diameter: 6 inch
Borehole Depth: 85 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40 feet bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-81 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		wet		12,12,15	46–48			SP	SAND: brownish gray, fine to medium; Trace Silt, Trace Clay, well graded, medium dense, no odor, no sheen
		wet		13,14,17	50–52			SM	SILTY SAND: brownish gray, fine sand, medium dense, no odor, no sheen
		wet		9,9,10	54–56				same as above
			X		58–60				collected GW-81-1
		wet		10,10,12	62–66				same as above
			X		68–70				collected GW-81-2
		wet		9,9,10	72–76				same as above, Trace Gravel @76.5'
			X		78–80				collected GW-81-3
		wet		6,7,9	82–86				same as above
					88				

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 26, 2010
Borehole Diameter: 6 inch
Borehole Depth: 85 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40 feet bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-81 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Backfill: Bentonite Chips		wet		8,9,9	90				collected GW-81-4
					92				
					94			SM	SILTY SAND: brownish gray, fine sand, medium dense, no odor, no sheen
					96				
					98				
					100				collected GW-81-5
									Boring terminated at 100 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 27, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40 feet bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-82

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips					2				Grass, soil surface
		damp		32,50 for 6"	6			SM	SILTY SAND: brown, fine to medium, Trace Coarse Sand and Grass Roots, medium dense, no odor, no sheen
		damp		33,50 for 5"	10			SW	SAND: brownish gray, fine to coarse, Trace Gravel and Silt, medium dense, no odor, no sheen
		damp		35,50 for 4"	16				same as above
		moist		12,12,15	20			SP-SM	SAND with SILT: grayish brown, fine to medium, medium dense, no odor, no sheen
		moist		9,12,12	26				same as above
		moist		10,12,14	30				same as above
		moist		7,8,8	36			SM	SILTY SAND: brownish gray, fine to medium, loose, no odor, no sheen
	▽	wet		6,7,8	40				same as above

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 27, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40 feet bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-82 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		wet		9,9,9	46			SM	SILTY SAND: brownish gray, fine to medium, loose, no odor, no sheen
					48				
		wet		9,9,9	50			SP-SM	decrease Silt content
					52				
					54				
		wet		7,7,9	56			SP-SM	SAND with SILT: gray Gravelly, fine to coarse, medium dense, no odor, no sheen
					58				
			X		60				collected GW-82-1, blind duplicate GW-82-2
					62				
					64				
		wet		6,8,8	66			SP-SM	SAND with SILT: gray, fine to medium, well sorted, loose, no odor, no sheen
					68				
			X		70				collected GW-82-3
					72				
					74				
		wet		6,7,8	76			SM	SILTY: gray, fine to medium, no odor, no sheen, soft
					78				
			X		80				collected GW-82-4
					82				
					84				
		wet		7,8,8	86				same as above
					88				

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 27, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40 feet bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-82 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		wet		7,8,10	90				collected GW-82-5
					92				
					94			SM	SILTY SAND: brownish gray, fine sand, medium dense, no odor, no sheen
					96				
					98				
					100				collected GW-82-6
									Boring terminated at 100 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 28, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40 feet bgs

PREMIER ENVIRONMENTAL SERVICES, INC

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-83

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips					2				Grass, soil surface
		damp		50 for 4"	6			SW	SAND: brown, fine to coase, Trace Gravelly, Trace Silt, medium dense, no odor, no sheen
		damp		50 for 5"	10				same as above
		damp		32,50 for 4"	16				same as above
		damp		34,50 for 4"	20			SP-SM	SAND with SILT: brown, fine to coase, medium dense, no odor, no sheen
		damp		22,20,22	26				same as above
		damp		15,16,18	30			SM	SILTY SAND: brownish, gray, fine to coarse Sand, medium dense, no odor, no sheen
		moist		12,12,14	36				same as above
	▽	wet		10,10,12	40			SW	SAND: gray, fine to coase, Trace Gravelly, Trace Silt, medium dense, no odor, no sheen
					42				
					44				

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 28, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40 feet bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-83 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		wet		10,10,12	46–48			SW	SAND: gray, fine to coase, Trace Gravelly, Trace Silt, medium dense, no odor, no sheen
		wet		10,12,14	50–52			SM	SILTY SAND: gray, fine to medium, medium dense, no odor, no sheen
		wet		10,10,13	54–56				same as above
			X		58–60				collected GW-83-1
		wet		8,8,10	62–66				same as above
			X		68–72				collected GW-83-2
		wet		7,10,10	74–76				SILTY SAND: gray, fine to coarse, Trace Gravel, medium dense, no odor, no sheen
			X		78–82				collected GW-83-3
		wet		7,8,8	84–86				SILTY SAND: brownish gray, fine to coarse, medium dense, loose, soft, no odor, no sheen
					88				

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: July 28, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40 feet bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-83 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips		wet		10,10,12	90–100			SM	SILTY SAND: brownish gray, fine to coarse, medium dense, loose, soft, no odor, no sheen
					100				Boring terminated at 100 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: October 19, 2010
Borehole Diameter: 6 inch
Borehole Depth: 101 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40.5 ft bgs

PREMIER ENVIRONMENTAL SERVICES, INC

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-84

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips					0				Gravel surface
		damp		8,8,8	4			GP-SP	SANDY GRAVEL: brown, fine to coarse, medium dense, no odor, no sheen
		damp		10,12,15	10				same as above
		damp		9,16,18	14				boulder @15'
		damp		50 for 3"	20			SM	SILTY SAND: brown, fine to coarse, medium dense, no odor, no sheen
		damp		12,14,19	24				@24.5' fine to medium sand
		damp		22,50 for 6"	30				same as above
		moist		12,12,14	34			ML	SANDY SILT: brown, fine sand, stiff, medium plasticity, dense, no odor, no sheen
	▽	wet		12,14,15	40			SM	SILTY SAND: brownish gray, fine to medium, medium dense, no odor, no sheen

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: October 19, 2010
Borehole Diameter: 6 inch
Borehole Depth: 101 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40.5 ft bgs

PREMIER ENVIRONMENTAL SERVICES, INC

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-84 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Backfill / Bentonite Chips		wet		16,19,23	46			SM	SILTY SAND: brownish gray, fine to medium, medium dense, no odor, no sheen
		wet		6,15,17	48–50				same as above
		wet		10,23,24	52–54				same as above, increase fine sand with depth
		wet		10,11,15	56				same as above
		wet		50 for 6"	58–60				same as above
		wet		15,50 for 6"	62–64				silt layer @64.5' to 64.8'
		wet		50 for 6"	66–68				@70' brown, fine to coarse sand, dense, heaving sands
		wet		50 for 6"	70–72				@75' multicolored
			⊠		74–80				collected GW-84-1
		wet		50 for 6"	82–84				same as above
					86–88				

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: October 19, 2010
Borehole Diameter: 6 inch
Borehole Depth: 101 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~40.5 ft bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-84 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Backfill: Bentonite Chips		wet		50 for 6"	90 92 94 96 98 100			SM	SILTY SAND: brown, fine to coarse sand, dense, no odor, no sheen, collected GW-84-2 collected GW-84-3
									Boring terminated at 101 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: October 20, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~50 ft bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-85

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips					2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44				Gravel surface
		damp		10,10,16	10			GP-SP	SANDY GRAVEL: brown, fine to coarse, medium dense, no odor, no sheen
		damp		22, 50 for 6"	20				decrease Gravel content
		damp		8,20,25	30			SM	SILTY SAND: brown, fine to medium, dense, no odor, no sheen
		damp		23,50 for 5"	40				same as above

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: October 20, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~50 ft bgs

PREMIER ENVIRONMENTAL SERVICES, INC

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-85 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips	▽				46			SM	SILTY SAND: brown, fine to medium, dense, no odor, no sheen
					48				
		wet		50 for 6"	50			SP	SAND: brown, fine to coarse; Some Silt, dense, no odor, no sheen
					52				
					54				
					56				
					58				
		wet		50 for 6"	60				boulder @60.3' ; heaving soils
					62				
					64				
					66				
					68				
		wet		50 for 6"	70				same as above
					72				
					74				
		wet		50 for 6"	76				same as above
					78				
			⊠		80				collected GW-85-1
					82				
					84				
		wet		50 for 6"	86				same as above
					88				

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: n/a
Slot Size: n/a
Gravel Pack: n/a

Location: Arlington, WA
Date Drilled: October 20, 2010
Borehole Diameter: 6 inch
Borehole Depth: 100 feet
Well Diameter: n/a
Well Depth: n/a
Casing Stickup: n/a
Water Table: ~50 ft bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-85 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
~140	n/a	n/a

Boring Completion	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Backfill: Bentonite Chips		wet		50 for 4"	90				collected GW-85-2
					92				
					94			SP	SAND: brown, fine to coarse; Some Silt, dense, no odor, no sheen
					96				
					98				
					100				collected GW-85-3
									Boring terminated at 100 feet and backfilled with bentonite chips and capped with cement

Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: Sch. 40 PVC
Slot Size: 20
Gravel Pack: 10/20

Location: Arlington, WA
Date Drilled: June 28 & 29, 2010
Borehole Diameter: 8 inch
Borehole Depth: 99 feet
Well Diameter: 2 inch
Well Depth: 80 feet
Casing Stickup: none
Water Table: ~40 ft bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Well No. MW-38

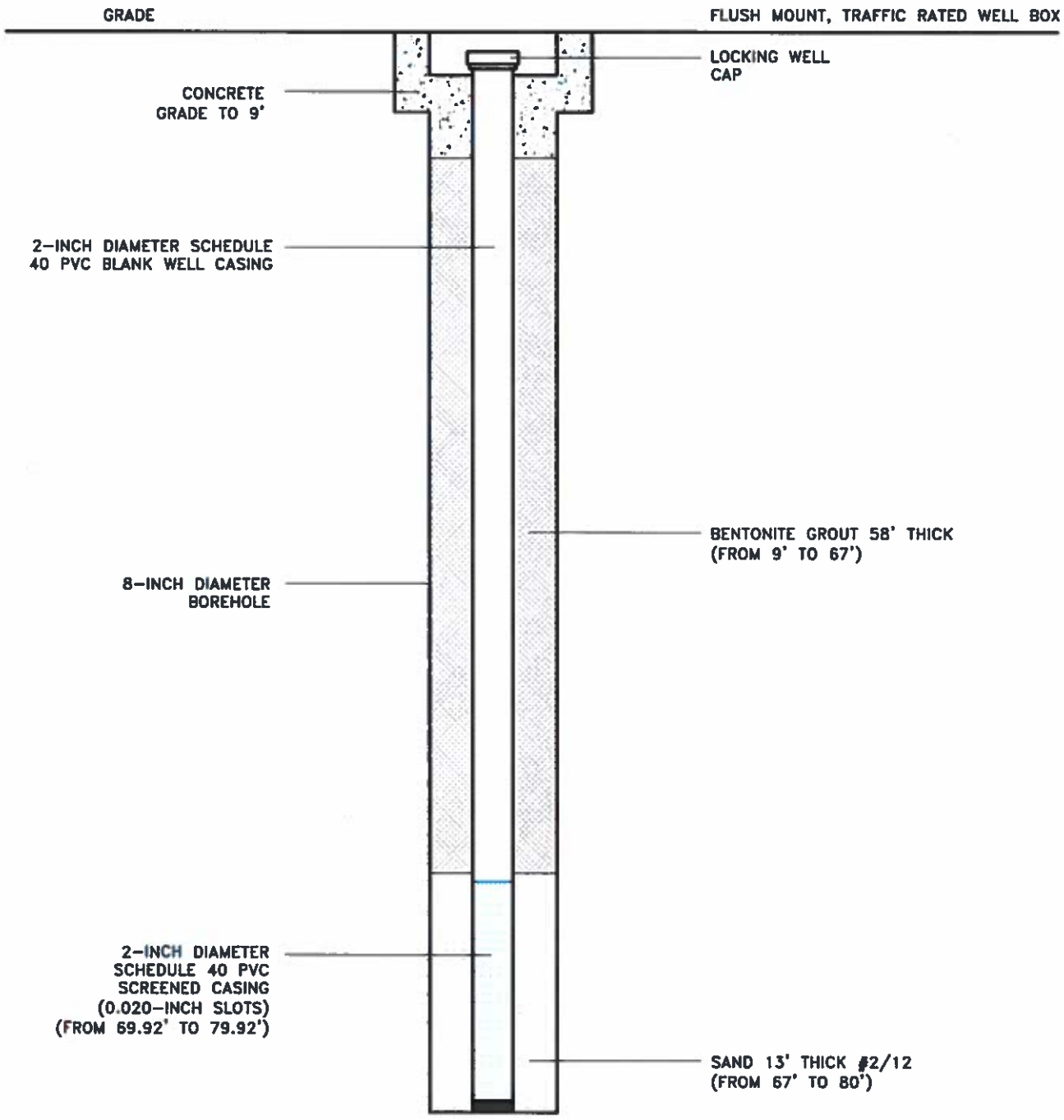
Elevation (feet msl)	Northing (feet)	Easting (feet)
143.36	427653.6	1320491.4

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
									See Boring Log MW-34 for soil description from 0-60 ft bgs
			X						collected GW-38-1
					62				
					64				
		moist		4,13,21	66			SW	SAND: brown, fine to medium, subrounded, saturated, well sorted
					68				
			X		70				collected GW-38-2
					72				
					74				
		moist		4,19,22	76				same as above
					78				
			X		80				collected GW-38-3; blind duplicate GW-38-4
					82				
					84				
		moist		3,10,11	86				same as above, except last 0.2' was fine SAND, Trace Silt
					88				
			X		90				collected GW-38-5
					92				
					94				
		moist		4,14,24	96				SAND: brown, fine to coarse, moderatelly sorted, Trace Gravel, fine to medium, subrounded, saturated, poorly sorted
			X		98				collected GW-38-6
					100				Boring terminated at 99 feet and well MW-38 installed.
									bgs = below ground surface

* See well description detail for well completion information

Client: J.H. Baxter	Location: Arlington, WA	PAGE 1 of 1
Logged By: Derek McGregor	Date Drilled: July 13, 2010	
Driller: Cascade Drilling	Borehole Diameter: 8 inch	PREMIER ENVIRONMENTAL SERVICES, INC
Drilling Method: HSA	Borehole Depth: 99 feet	
Sampling Method: Hydropunch	Well Diameter: 2 inch	**Project Name: J.H. Baxter - Supplemental Groundwater**
Casing Type: Sch. 40 PVC	Well Depth: 80 feet	**Project No: 210129.00 Task 2**
Slot Size: 20	Casing Stickup: none	
Gravel Pack: 10/20	Water Table: ~40 ft bgs	

Well No. MW-38	Elevation (feet msl)	Northing (feet)	Easting (feet)
	143.36	427653.6	1320491.4



Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: Sch. 40 PVC
Slot Size: 20
Gravel Pack: 10/20

Location: Arlington, WA
Date Drilled: July 14, 2010
Borehole Diameter: 8 inch
Borehole Depth: 81.5 feet
Well Diameter: 2 inch
Well Depth: 79.8 feet
Casing Stickup: none
Water Table: ~40 ft bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Well No. MW-39

Elevation (feet msl)	Northing (feet)	Easting (feet)
142.73	427993.1	1320148.9

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
		damp			0			SW	SAND: brown, fine to medium, Trace Gravel, and Trace Silt, Organic Natural, Grass, loose, no odor, no sheen
		damp		10,12,13	6				same as above, grass roots at top
		damp		16,18,20	10				SAND: brown, fine to coarse, Trace Gravel, and Trace Silt, medium dense, moderately sorted, no odor, no sheen
		moist		9,11,13	16				same as above, well graded, loose
		moist		5,10,14	20				same as above, become brownish gray
		damp		11,15,15	26			SP-SM	SAND: brown, fine to medium, Some coarse Sand and Silt, medium dense, no odor, no sheen
		damp		7,11,14	30				same as above
		damp		10,16,22	36				same as above
		wet		10,16,22	40				same as above

* See well description detail for well completion information

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: Sch. 40 PVC
Slot Size: 20
Gravel Pack: 10/20

Location: Arlington, WA
Date Drilled: July 14, 2010
Borehole Diameter: 8 inch
Borehole Depth: 81.5 feet
Well Diameter: 2 inch
Well Depth: 79.8 feet
Casing Stickup: none
Water Table: ~40 ft bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Well No. MW-39 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
142.73	427993.1	1320148.9

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
		wet		14,18,20	46–48			SP-SM	SAND: brown, fine to medium, Some coarse Sand and Silt, medium dense, no odor, no sheen
		wet		13,13,19	50–52				same as above
		wet		13,15,19	54–56				
		wet		6,9,11	58–60			ML	SANDY SILT: brown, fine, medium dense, low plasticity, no odor, no sheen
		wet		8,12,12	62–64			SP-SM	SAND with SILT: gray, fine to medium, medium dense, no odor, no sheen
				9,13,15	66–68				same as above
		wet		8,8,12	70–72			SM	SILTY SAND: brown, fine to medium, medium dense, no odor, no sheen; collected GW-39-1
				17,15,16	74–76				Boring terminated at 81.5 feet and well MW-39 installed.
					78–80				

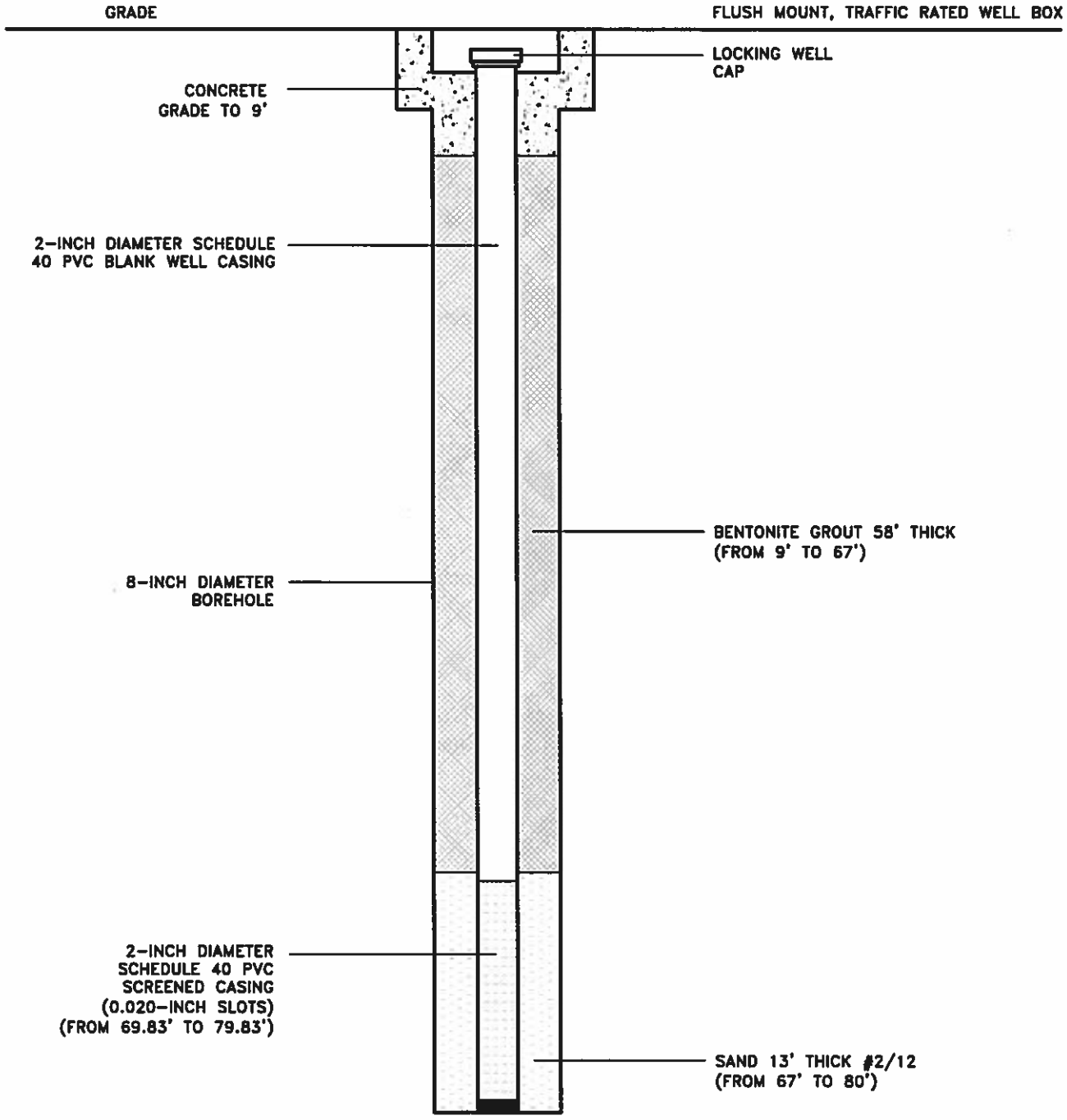
* See well description detail for well completion information

Client: J.H. Baxter	Location: Arlington, WA	PAGE 1 of 1
Logged By: Derek McGregor	Date Drilled: July 14, 2010	
Driller: Cascade Drilling	Borehole Diameter: 8 inch	
Drilling Method: HSA	Borehole Depth: 81.5 feet	
Sampling Method: Hydropunch	Well Diameter: 2 inch	
Casing Type: Sch. 40 PVC	Well Depth: 79.8 feet	
Slot Size: 20	Casing Stickup: none	
Gravel Pack: 10/20	Water Table: ~40 ft bgs	

PREMIER
ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Well No. MW-39	Elevation (feet msl)	Northing (feet)	Easting (feet)
	142.73	427993.1	1320148.9



Client: J.H. Baxter
Logged By: Derek McGregor
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: Sch. 40 PVC
Slot Size: 20
Gravel Pack: 10/20

Location: Arlington, WA
Date Drilled: July 1 & 2, 2010
Borehole Diameter: 8 inch
Borehole Depth: 90 feet
Well Diameter: 2 inch
Well Depth: 79.8 feet
Casing Stickup: none
Water Table: ~40 bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring SB-77/MW-40

Elevation (feet msl)	Northing (feet)	Easting (feet)
142.56	427859.5	1320316.6

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
									See Boring Log MW-15 for soil description from 0-55 ft bgs
		moist		4,4,4	56			SP	SAND: brown, fine to medium, subangular, saturated, well sorted
					58				
			X		60				collected GW-77-1, blind duplicate GW 77-2
					62				
					64				
		moist		5,10,15	66			SW	SAND: brown, fine to coarse, subangular, saturated; last 0.3' - Trace Gravel, subrounded, moderately sorted
					68				
			X		70				collected GW-77-3
					72				
					74				
		moist		50+	76			SM	SILT: brown, Some very fine Sand, no plasticity, Trace Gravel, fine, subrounded, collected GW-77-4
			X		78				
					80				
					82				
					84				
		moist		10,10,10	86			SP	SAND: brown, medium to coarse, subangular, saturated, well sorted
					88				
			X		90				collected GW-77-5
					92				Boring terminated at 90 feet and well MW-40 installed.
					94				

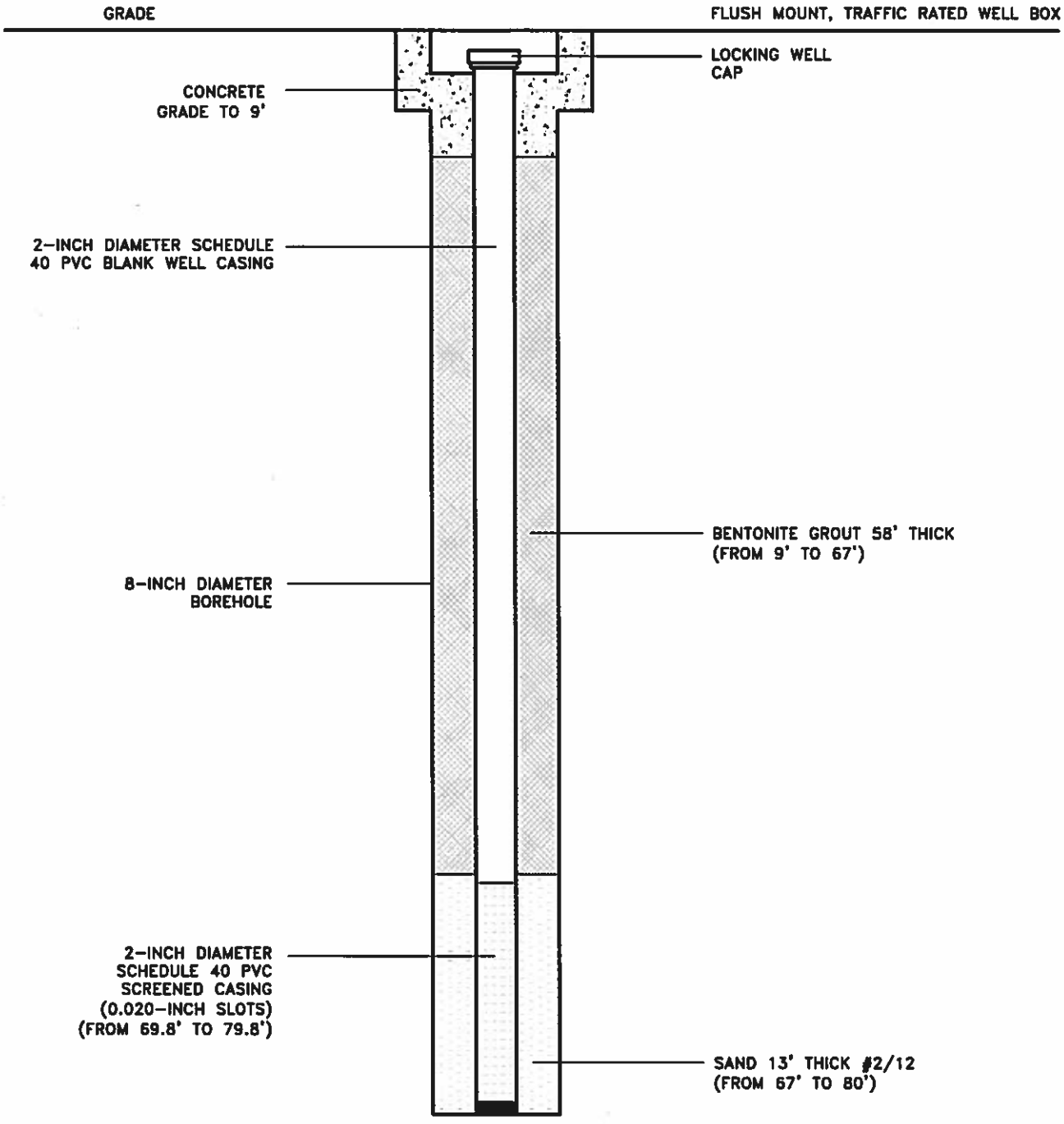
* See well description detail for well completion information

Client: J.H. Baxter	Location: Arlington, WA
Logged By: Derek McGregor	Date Drilled: July 15, 2010
Driller: Cascade Drilling	Borehole Diameter: 8 inch
Drilling Method: HSA	Borehole Depth: 90 feet
Sampling Method: Hydropunch	Well Diameter: 2 inch
Casing Type: Sch. 40 PVC	Well Depth: 79.8 feet
Slot Size: 20	Casing Stickup: none
Gravel Pack: 10/20	Water Table: ~40 bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Well No. MW-40	Elevation (feet msl)	Northing (feet)	Easting (feet)
	142.56	427859.5	1320316.6



Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: Sch. 40 PVC
Slot Size: 20
Gravel Pack: 10/20

Location: Arlington, WA
Date Drilled: July 16, 2010
Borehole Diameter: 10 inch
Borehole Depth: 81.5 feet
Well Diameter: 4 inch
Well Depth: 79.2 feet
Casing Stickup: none
Water Table: ~40 bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Well No. MW-41

Elevation (feet msl)	Northing (feet)	Easting (feet)
142.33	427968.1	1320255

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
									See Boring Log MW-37 for soil description from 0-60 ft bgs
		wet		7,15,17	62			SW	SAND with Silt: grayish brown, fine to coarse, medium dense, no odor, no sheen
					64				
		moist		6,18,19	66				@66' SAND with Silt: gray, fine to coarse, Gravelly, medium dense, no odor, no sheen
					68				
				10,11,14	70				same as above
					72				
					74				
		wet		9,9,13	76				SAND with Silt: grayish brown, fine to coarse, medium dense, no odor, no sheen
					78				
					80				
				6,12,18					Boring terminated at 81.5 feet and well installed.

bgs = below ground surface

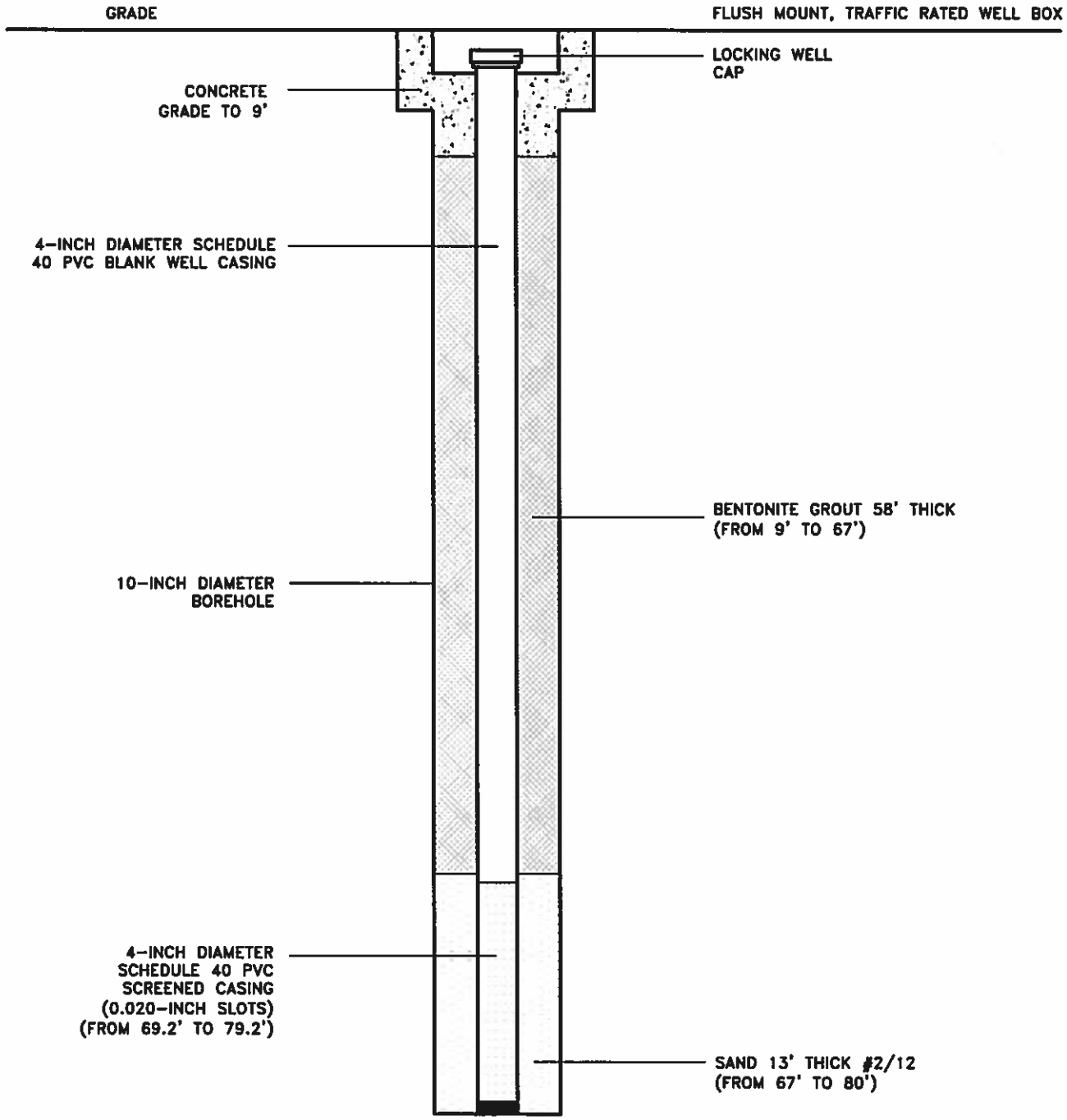
* See well description detail for well completion information

Client: J.H. Baxter	Location: Arlington, WA	PAGE 1 of 1
Logged By: Derek McGregor	Date Drilled: July 16, 2010	
Driller: Cascade Drilling	Borehole Diameter: 10 inch	
Drilling Method: HSA	Borehole Depth: 81.5 feet	
Sampling Method: Hydropunch	Well Diameter: 4 inch	
Casing Type: Sch. 40 PVC	Well Depth: 79.2 feet	
Slot Size: 20	Casing Stickup: none	
Gravel Pack: 10/20	Water Table: ~40 bgs	

PREMIER
ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Well No. MW-41	Elevation (feet msl)	Northing (feet)	Easting (feet)
	142.33	427968.1	1320255



Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: Sch. 40 PVC
Slot Size: 20
Gravel Pack: 10/20

Location: Arlington, WA
Date Drilled: July 30, 2010
Borehole Diameter: 8 inch
Borehole Depth: 91.5 feet
Well Diameter: 2 inch
Well Depth: 89.1 feet
Casing Stickup: none
Water Table: ~40 bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Well No. MW-42	Elevation (feet msl)	Northing (feet)	Easting (feet)
	142.89	428319.7	1320080.9

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
									See Boring Log MW-18 for soil description from 0-60 ft bgs
		wet		10,10,12	62			SP-SM	SAND with Silt: grayish brown, fine to coarse, medium dense, no odor, no sheen
		moist		9,9,11	66				@66' SAND with Silt: gray, fine to coarse, Gravelly, medium dense, no odor, no sheen
		moist		8,9,12	70				same as above
		wet		6,10,12	76				SAND with Silt: grayish brown, fine to coarse, medium dense, no odor, no sheen
		wet		10,10,8	80				same as above
		wet		6, 8, 8	86				same as above
		wet		10,10,8	90				Boring terminated at 91.5 feet and well MW-42 installed.

bgs = below ground surface

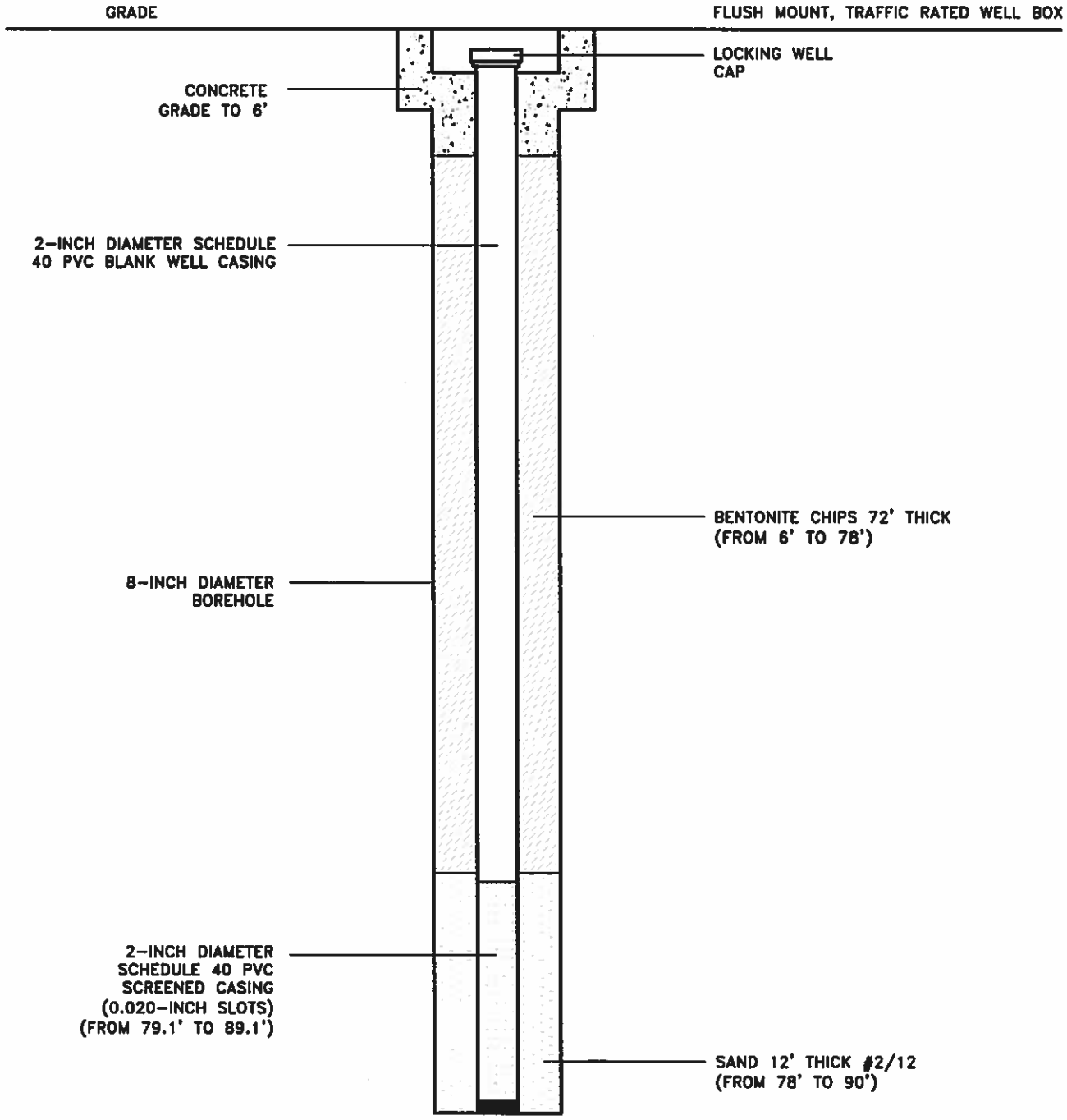
* See well description detail for well completion information

Client: J.H. Baxter	Location: Arlington, WA
Logged By: Derek McGregor	Date Drilled: July 30, 2010
Driller: Cascade Drilling	Borehole Diameter: 8 inch
Drilling Method: HSA	Borehole Depth: 91.5 feet
Sampling Method: Hydropunch	Well Diameter: 2 inch
Casing Type: Sch. 40 PVC	Well Depth: 89.1 feet
Slot Size: 20	Casing Stickup: none
Gravel Pack: 10/20	Water Table: ~40 bgs

PREMIER
ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Well No. MW-42	Elevation (feet msl)	Northing (feet)	Easting (feet)
	142.89	428319.7	1320080.9



Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: Sch. 40 PVC
Slot Size: 20
Gravel Pack: 10/20

Location: Arlington, WA
Date Drilled: October 19, 2010
Borehole Diameter: 8 inch
Borehole Depth: 110 feet
Well Diameter: 2 inch
Well Depth: 100 feet
Casing Stickup: none
Water Table: ~44 ft bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring MW-43

Elevation (feet msl)	Northing (feet)	Easting (feet)
141.91	428757.5	1319841.1

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
					0				Grass, soil surface
		damp		9,11,15	4			GP-SP	SANDY GRAVEL: brown, multicolored, trace Silt, medium dense, no odor, no sheen
		damp		13,13,16	10				same as above
		damp		50 for 6"	14				same as above, very dense, increase Sand
		damp		18, 50 for 6"	20				same as above
		damp		43, 50 for 6"	24			SP	@24.4' SAND: grayish brown, fine to medium; Some coarse Sand and Silt, very dense, no odor, no sheen
		damp		14,15,19	30			SP-SM	SILTY SAND: grayish brown, fine to medium, medium dense, no odor, no sheen
		damp		19,20,23	34				fine silty sand
	▽	moist		14,15,20	40				same as above
					44				

* See well description detail for well completion information

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: Sch. 40 PVC
Slot Size: 20
Gravel Pack: 10/20

Location: Arlington, WA
Date Drilled: October 19, 2010
Borehole Diameter: 8 inch
Borehole Depth: 110 feet
Well Diameter: 2 inch
Well Depth: 100 feet
Casing Stickup: none
Water Table: ~44 ft bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring MW-43 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
141.91	428757.5	1319841.1

Boring Completion: Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
		wet		10,16,16	46			SM	SILTY SAND: grayish brown, fine sand, medium dense, no odor, no sheen (coarse sand from 44' to 44.5')
		wet		11,15,16	48, 50				SILTY CLAY @49.5' to 49.8'
		wet		15,17,18	52, 54			SM-SP	SILTY SAND: grayish, multicolored, fine to medium, medium dense, no odor, no sheen, lot of heave
		wet		18,50 for 6"	56				
		wet		50 for 6"	58, 60, 62			GP-SP	SANDY GRAVEL: multicolored, coarse Sand, trace Silt, very dense, no odor, no sheen
		wet		50 for 6"	64, 66				medium to coarse Sand, loose
		wet		50 for 6"	68, 70, 72				same as above
			X		74, 76, 78, 80				collected GW-43-1
		wet		50 for 6"	82			SM	SILTY SAND: grayish, multicolored, fine to medium, loose, no odor, no sheen, heave
					84, 86, 88				

* See well description detail for well completion information

Client: J.H. Baxter
Logged By: Elizabeth Poole
Driller: Cascade Drilling
Drilling Method: HSA
Sampling Method: Hydropunch
Casing Type: Sch. 40 PVC
Slot Size: 20
Gravel Pack: 10/20

Location: Arlington, WA
Date Drilled: October 19, 2010
Borehole Diameter: 8 inch
Borehole Depth: 110 feet
Well Diameter: 2 inch
Well Depth: 100 feet
Casing Stickup: none
Water Table: ~44 ft bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Boring MW-43 (cont.)

Elevation (feet msl)	Northing (feet)	Easting (feet)
141.91	428757.5	1319841.1

Boring Completion / Backfill	Water Level	Moisture Content	Groundwater Sample Interval	Blow Counts	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
			X		90				collected GW-43-2
					92				
					94				
		wet		50 for 6"	96			SM	SILTY SAND: grayish brown, fine sand, loose, no odor, no sheen
					98				
			X		100				collected GW-43-3
		wet		50 for 6"	102				same as above
					104				
					106				
					108				
			X		110				collected GW-43-4
									Boring terminated at 110 feet and well MW-43 installed.

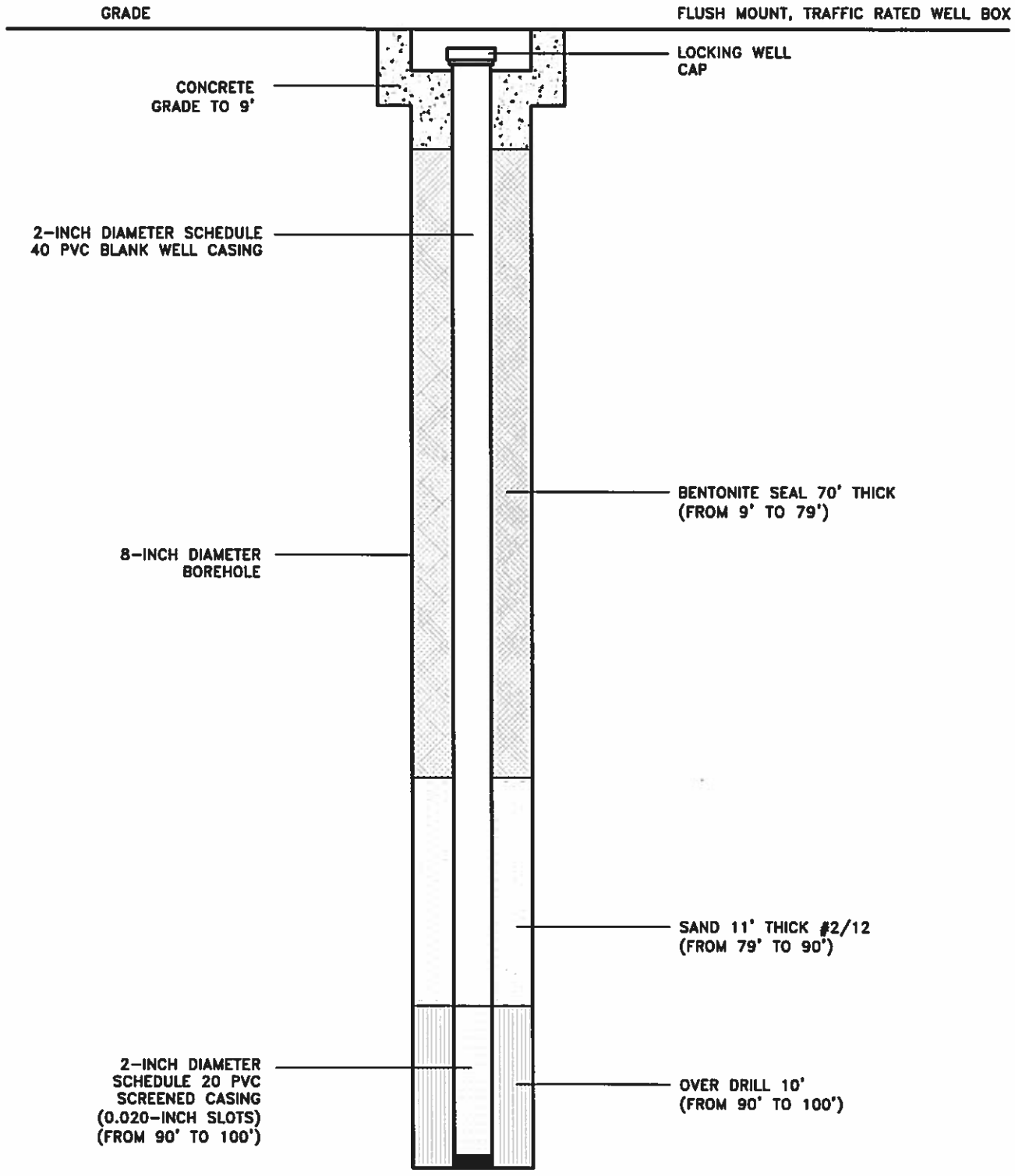
* See well description detail for well completion information

Client: J.H. Baxter	Location: Arlington, WA
Logged By: Elizabeth Poole	Date Drilled: October 19, 2010
Driller: Cascade Drilling	Borehole Diameter: 8 inch
Drilling Method: HSA	Borehole Depth: 110 feet
Sampling Method: Hydropunch	Well Diameter: 2 inch
Casing Type: Sch. 40 PVC	Well Depth: 100 feet
Slot Size: 20	Casing Stickup: none
Gravel Pack: 10/20	Water Table: ~44 ft bgs

PREMIER ENVIRONMENTAL SERVICES, INC.

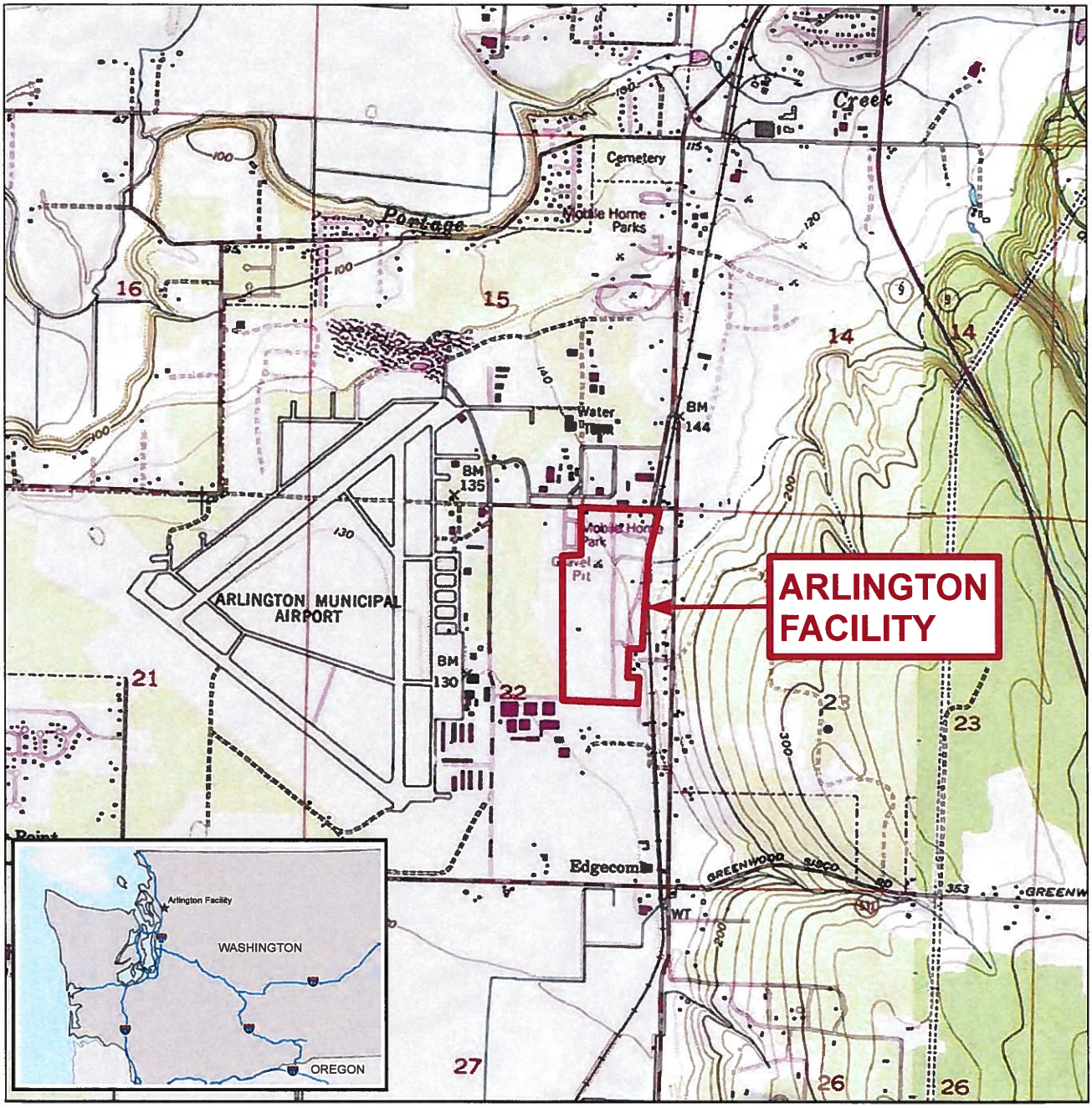
Project Name: J.H. Baxter - Supplemental Groundwater
Project No: 210129.00 Task 2

Well No. MW-43	Elevation (feet msl)	Northing (feet)	Easting (feet)
	141.91	428757.5	1319841.1



Appendix I

Source Area Investigation and Chemical Oxidation Bench Study Figures



APPENDIX I-1

Site Vicinity Map

Former J.H. Baxter Wood Treating Facility
Arlington, Washington

MAP NOTES:
Data Sources: Geomatrix, Appendix C, Stand-Alone Data Document (2014), December 2014

N

0 500 1,000 1,500 2,000
Feet

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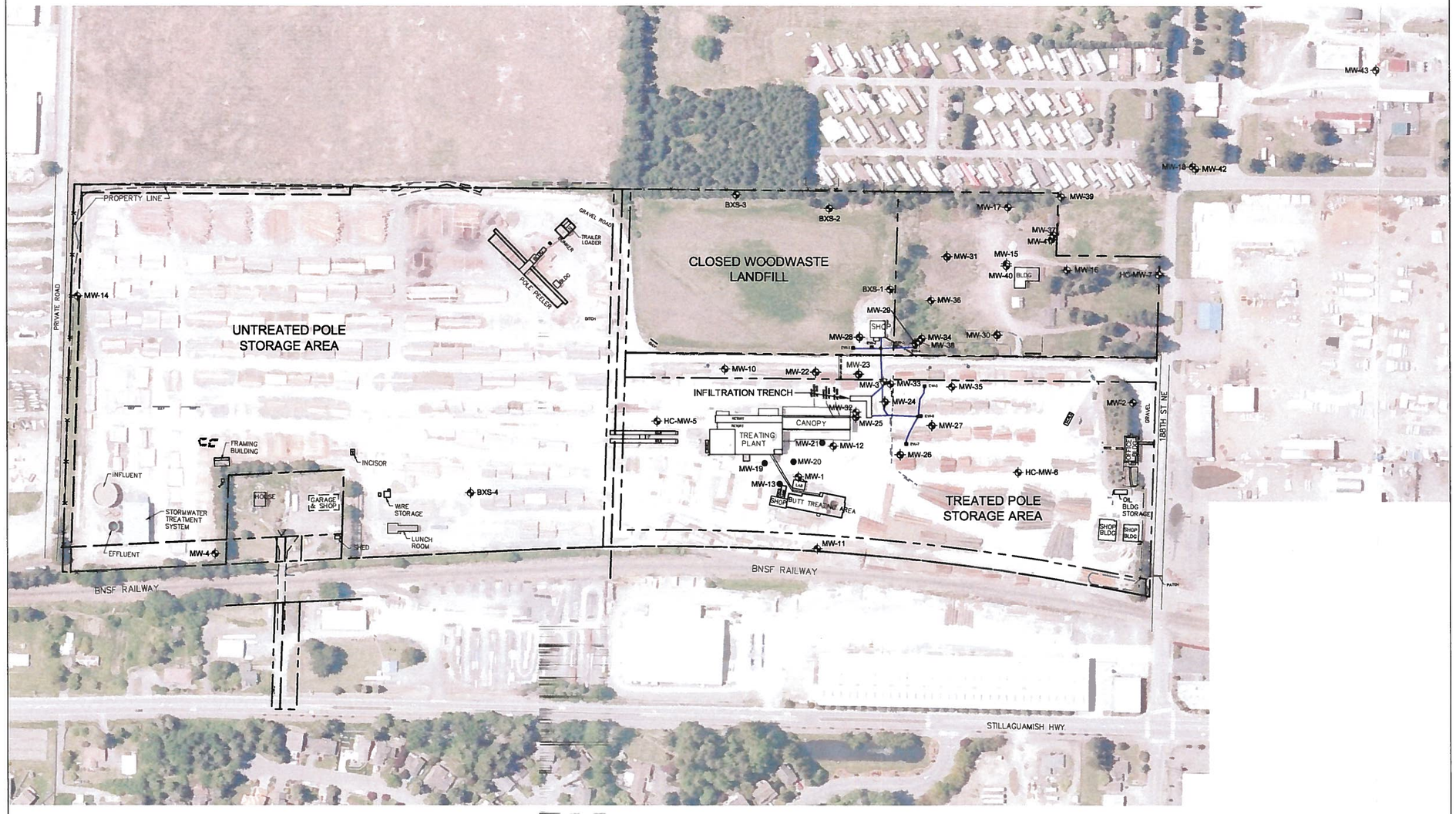
APPENDIX I-2

Site Plan and Groundwater Monitoring Network

Former J.H. Baxter Wood Treating Facility
Arlington, Washington



LEGEND

- MW-11 — Monitoring Well (Sampled September 2013)
- Extraction Well
- Recovery Well
- Approxiamte Site Boundary
- Layout of Groundwater Recirculation Piping

N

0 110 220 330
Feet

MAP NOTES:
Data Sources: Geomatrix, Appendix C, Stand-Alone Data Document (2014), December 2014

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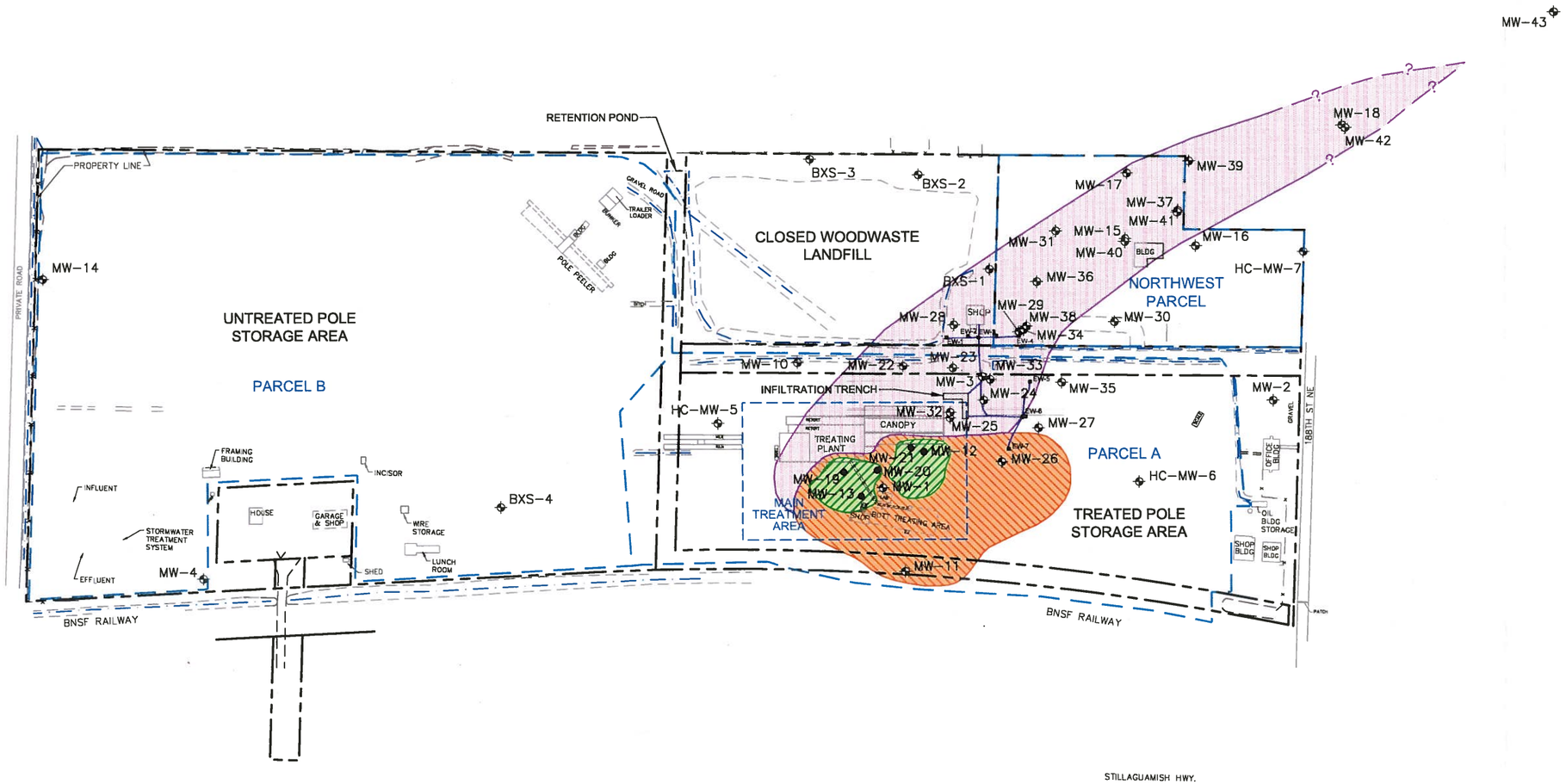
APPENDIX I-3

Areas of Concern

Former J.H. Baxter Wood Treating Facility
Arlington, Washington



LEGEND

- Existing Monitoring Well
- Existing LNAPL Recovery Well
- EW-1 ■ Extration Well and Vault Identifying Number
- Layout of Groundwater Recirculation Piping
- Approximate Operational Area Boundary Based on Current and Former Use
- Approximate Baxter Property Boundary
- Drainage Ditch
- Areas with Soils Above Proposed Cleanup Levels
- Approximate Area of Residual LNAPL in Soil
- Approximate Extent of PCP Plume in Groundwater

ABBREVIATIONS:
COCs = Constituents of Concern
PCP = PentaChlorophenol
LNAPL = Light Nonaqueous-Phase Liquid

NOTE:
Soils above proposed cleanup levels include surface and subsurface soils.

N

0 110 220 330
Feet

MAP NOTES:
Data Sources: Geomatrix, Appendix C, Stand-Alone Data Document (2014), December 2014

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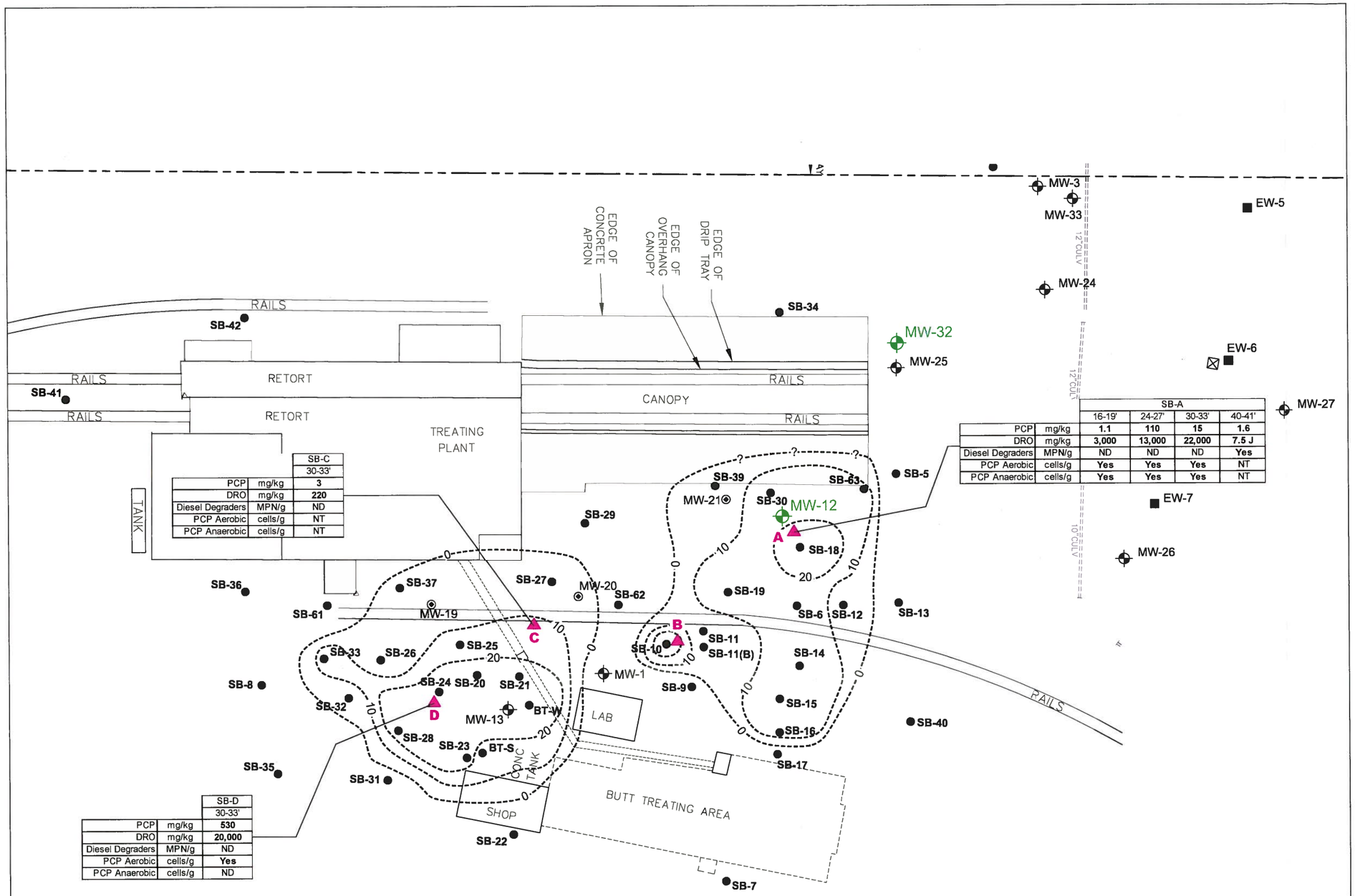
APPENDIX I-4

Borehole Soil Sampling Locations and Results - September 2013

Former J.H. Baxter Wood Treating Facility
Arlington, Washington



LEGEND

- Borehole (Completed September 2013)
- Monitoring Well (Sampled September 2013) Additional Well Located Off-Map Include MW-11, MW-36 and MW-41. See Figure 2.
- Soil Boring
- Monitoring Well
- Extraction Well
- Recovery Well
- NAPL Thickness Contour (approximate, ft)

ABBREVIATIONS:

ND:	Not Detected
NT:	Not Tested
PCP:	Pentachlorophenol
DRO:	Diesel Range Organics
Diesel Degraders:	Hydrocarbon Degrading Bacteria
PCP Aerobic:	PCP Resulator Gene
PCP Anaerobic:	Desulfitobacterium SPP
MPN/g:	Most Probably Number of Cells per Gram
cells/g:	Cells per Gram

N

0 20 40 60
Feet

MAP NOTES:
Data Sources: Geomatrix, Appendix C, Stand-Alone Data Document (2014), December 2014

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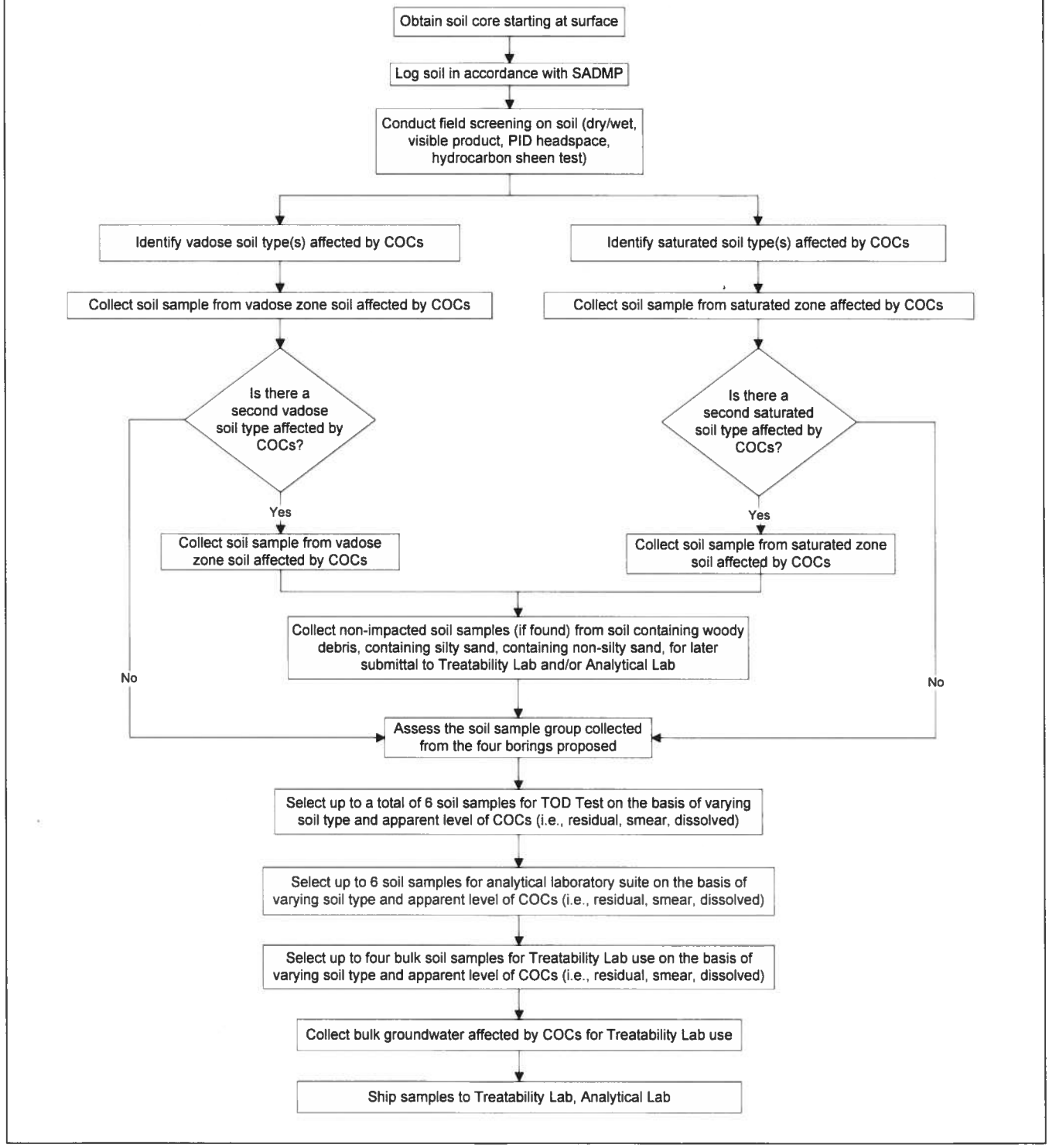

APPENDIX I-5

Soil Sampling Guide

Former J.H. Baxter Wood Treating Facility
Arlington, Washington

MAP NOTES:
Data Sources Geomatrix, Appendix C, Stand-Alone Data Document (2014), December 2014

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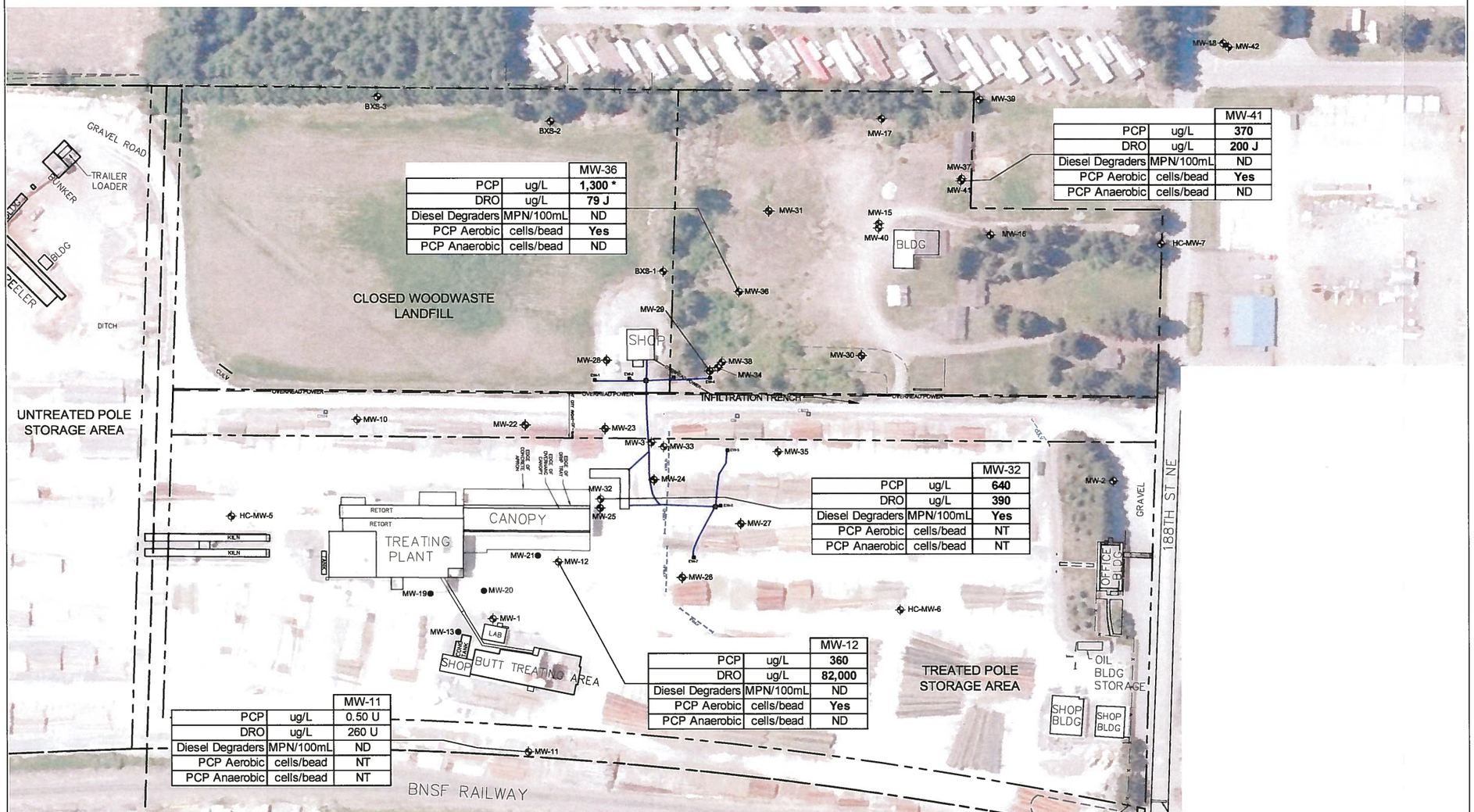


		MW-36
PCP	ug/L	**1,300 ***
DRO	ug/L	**79 J**
Diesel Degraders	MPN/100mL	ND
PCP Aerobic	cells/bead	**Yes**
PCP Anaerobic	cells/bead	ND

		MW-41
PCP	ug/L	**370**
DRO	ug/L	**200 J**
Diesel Degraders	MPN/100mL	ND
PCP Aerobic	cells/bead	**Yes**
PCP Anaerobic	cells/bead	ND

		MW-32
PCP	ug/L	**640**
DRO	ug/L	**390**
Diesel Degraders	MPN/100mL	**Yes**
PCP Aerobic	cells/bead	NT
PCP Anaerobic	cells/bead	NT

		MW-12
PCP	ug/L	**360**
DRO	ug/L	**82,000**
Diesel Degraders	MPN/100mL	ND
PCP Aerobic	cells/bead	**Yes**
PCP Anaerobic	cells/bead	ND

		MW-11
PCP	ug/L	0.50 U
DRO	ug/L	260 U
Diesel Degraders	MPN/100mL	ND
PCP Aerobic	cells/bead	NT
PCP Anaerobic	cells/bead	NT

APPENDIX I-6

Summary of Groundwater PCP, DRO and Biological Monitoring Results September/December 2013

Former J.H. Baxter Wood Treating Facility
Arlington, Washington

LEGEND

- MW-11 — Monitoring Well (Sampled September 2013 for PCP, DRO and Hydrocarbon Degrading Bacteria) (Sampled December 2013 for PCP Degradation Genetic Markers)
- Extraction Well
- Recovery Well
- Approximate Site Boundary
- Layout of Groundwater Recirculation Piping

ABBREVIATIONS:

ND:	Not Detected
NT:	Not Tested
PCP:	Pentachlorophenol
DRO:	Diesel Range Organics
Diesel Degraders:	Hydrocarbon Degrading Bacteria
PCP Aerobic:	PCP Resulator Gene
PCP Anaerobic:	Desulfitobacterium SPP
MPN/g:	Most Probably Number of Cells per Gram
cells/g:	Cells per Gram

N

0 110 220 330
Feet

MAP NOTES:
Data Sources: Geomatrix, Appendix C, Stand-Alone Data Document (2014), December 2014

GSI Water Solutions, Inc.

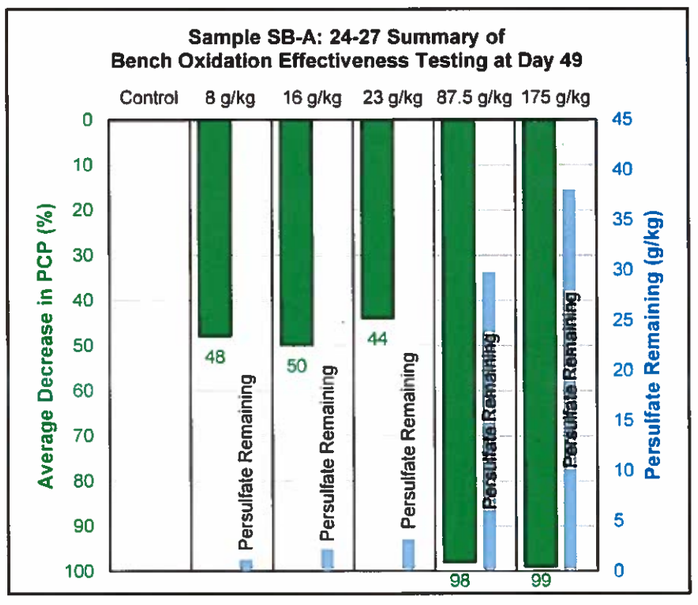
APPENDIX I-7

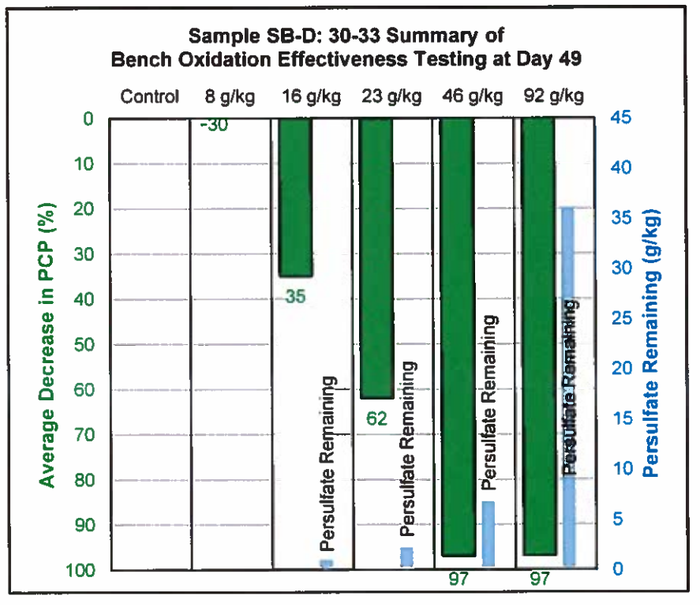
Pentachlorophenol Oxidized vs Persulfate Used at Day 49

Former J.H. Baxter Wood Treating Facility
Arlington, Washington

Sample SB-A: 24-27		
Persulfate Dose	Average % Decrease in PCP	Persulfate Remaining (g/kg)
Control	0	0
8 g/kg	48	1.2
16 g/kg	50	2.2
23 g/kg	44	3.2
87.5 g/kg	98	29.9
175 g/kg	99	38.1

Sample SB-D: 30-33		
Persulfate Dose	Average % Decrease in PCP	Persulfate Remaining (g/kg)
Control	0	0
8 g/kg	-30	0
16 g/kg	35	1
23 g/kg	62	2.2
46 g/kg	97	6.8
92 g/kg	97	36.1





NOTES:
% = percent.
g/Kg = gram per kilogram.
PCP = pentachlorophenol

MAP NOTES:
Data Sources: Geomatrix, Appendix C, Stand-Alone Data Document (2014), December 2014

GSI Water Solutions, Inc.

Appendix J

Source Area Investigation and Chemical Oxidation Bench Study Boring Logs

PROJECT: Former J.H. Baxter Arlington, Washington		**Log of Boring No. SB-A**	
BORING LOCATION:		ELEVATION AND DATUM:	
DRILLING CONTRACTOR: Cascade Drilling, Inc.		DATE STARTED: 9/20/13	DATE FINISHED: 9/20/13
DRILLING METHOD: Sonic drilling		TOTAL DEPTH (ft.): 45.0	MEASURING POINT:
DRILLING EQUIPMENT: Prosonic, Spider Track Mounted Limited Access Rig		DEPTH TO WATER (ft.)	FIRST ~ 30 ft / COMPL.
SAMPLING METHOD: 5-foot-continuous-core system [5' x 4" OD]		LOGGED BY: Nathan Moxley	
HAMMER WEIGHT: NA	DROP: NA	RESPONSIBLE PROFESSIONAL: Steve Barnett, LG	REG. NO. 1051

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					AGGREGATE BASE (GP): Light grayish brown, moist, gravel with sand and silt (roadbase FILL) (no odor)	Bagged Samples Sheen Testing Results:
2				0.5		no sheen
3						
4						
5				0.4		no sheen
6						
7				5.2	WOOD DEBRIS: Dark brown to black, moist, 95% WOOD DEBRIS, 5% fine sand (faint odor)	no sheen
8						
9					rock fragment	
10	SB-A: 10 - 11			2.1		no sheen
11						
12				0.0		no sheen
13						
14				0.1		no sheen
15					POORLY-GRADED GRAVEL (GP): Gray, rounded cobble fragments	
16				10.1	POORLY-GRADED SAND with GRAVEL (SP): Gray, moist, 80% medium to coarse SAND with 15% rounded gravel, and 5% fine sand (odor)	abundant sheen with product droplets
17	SB-A: 16 - 19					
18				15.6		slight sheen
19					POORLY-GRADED SAND (SP): Light brown, moist, 85% fine to medium SAND with 10% coarse sand and 5% gravel (slight odor)	
20						

PROJECT: Former J.H. Baxter
Arlington, Washington

Log of Boring No. SB-A (cont'd)

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
21				5.6	WOOD DEBRIS: Dark brown to black, moist, 95% WOOD DEBRIS, 5% fine sand (faint odor)	abundant sheen with product droplets
22				1.8	Gray, silty, fine SAND lense	
23					POORLY-GRADED SAND with GRAVEL (SP): Gray, moist, 75% medium to coarse SAND with 15% rounded gravel, 5% fine sand, and 5% wood debris (odor and staining)	no sheen
24	SB-A: 24 - 27					
25				15.8	POORLY-GRADED SAND (SP): Grayish brown, moist, 90% fine to medium SAND with 5% coarse sand and 5% gravel (odor and staining)	abundant sheen with product droplets
26				16.0		abundant sheen with product droplets
27						
28						
29				19.0	POORLY-GRADED SAND with SILT (SP-SM): Light brown, moist, 85% fine SAND with 10% silt and 5% gravel (odor and staining)	abundant sheen with product droplets
30					becomes wet	
31	SB-A: 30 - 33			22.8		free product visible
32						
33				16.1	residual free product visible in core bag at 33 ft	free product visible
34						
35						slight sheen
36				0.1		no sheen
37						
38						
39				0.5		
40	SB-A: 40 - 41					no sheen
41				0.3		
42						no sheen
43						
44						

OAKBOREV (REV. 8/2011)

PROJECT: Former J.H. Baxter
Arlington, Washington

Log of Boring No. SB-A (cont'd)

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
45				0.0		no sheen
46					Boring terminated at 45 feet and backfilled with bentonite chips	
47						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						

PROJECT: Former J.H. Baxter Arlington, Washington	**Log of Boring No. SB-B**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/20/13 / DATE FINISHED: 9/20/13
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 40.0 / MEASURING POINT:
DRILLING EQUIPMENT: Prosonic, Spider Track Mounted Limited Access Rig	DEPTH TO WATER (ft.) FIRST ~ 30 ft / COMPL.
SAMPLING METHOD: 5-foot-continuous-core system [5' x 4" OD]	LOGGED BY: Nathan Moxley
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: Steve Barnett, LG / REG. NO. 1051

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					AGGREGATE BASE (GP): Light grayish brown, moist, gravel with sand and silt (roadbase FILL) (no odor)	Bagged Samples Sheen Testing Results:
2				2.1		no sheen
3						
4					WOOD DEBRIS: Dark brown to black, moist, 95% WOOD DEBRIS, 5% fine sand (faint odor)	
5				1.6	POORLY-GRADED SAND (SP): Light grayish brown, moist, 90% fine to medium SAND with 5% silt and 5% gravel (no odor)	no sheen
6				3.3	POORLY-GRADED SAND (SP): Light grayish brown with reddish gray and gray staining, moist, 60% medium to coarse SAND with 30% fine sand and 10% gravel (slight odor)	slight sheen
7						
8						
9				1.4		no sheen
10					POORLY-GRADED SAND with GRAVEL (SP): Light grayish brown with dark gray staining, moist, 65% medium to coarse SAND with 25% gravel and 10% fine sand (no odor)	
11				6.8		no sheen
12						
13						
14				2.0		no sheen
15						
16				1.1	contains rounded cobbles	no sheen
17						
18	SB-B: 18 - 20					
19				0.6		no sheen
20						

PROJECT: Former J.H. Baxter
Arlington, Washington

Log of Boring No. SB-B (cont'd)

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
21					POORLY-GRADED SAND (SP): Light brown with gray staining, moist, 80% fine to medium SAND, with 10% coarse sand and 10% gravel (slight odor)	
				2.4		no sheen
22						
23						
24				1.2		no sheen
25					no staining visible	
26				3.0		slight sheen
27						
28					general grain size decreases to 95% fine to medium SAND with 5% gravel	
29				2.6		no sheen
30						
31				15.9	free product visible inside core bag	abundant sheen with product droplets
32						
33				15.4		free product visible
34					POORLY-GRADED SAND with SILT (SP-SM): Light brown, wet, 85% fine SAND with 15% silt (odor)	
35						
36				5.5		slight sheen
37						
38						
39				2.8		no sheen
40						
41					Boring terminated at 40 feet and backfilled with bentonite chips.	
42						
43						
44						

PROJECT: Former J.H. Baxter Arlington, Washington		**Log of Boring No. SB-C**	
BORING LOCATION:		ELEVATION AND DATUM:	
DRILLING CONTRACTOR: Cascade Drilling, Inc.		DATE STARTED: 9/20/13	DATE FINISHED: 9/20/13
DRILLING METHOD: Sonic drilling		TOTAL DEPTH (ft.): 40.0	MEASURING POINT:
DRILLING EQUIPMENT: Prosonic, Spider Track Mounted Limited Access Rig		DEPTH TO WATER (ft.)	FIRST – 30 ft / COMPL.
SAMPLING METHOD: 5-foot-continuous-core system [5' x 4" OD]		LOGGED BY: Nathan Moxley	
HAMMER WEIGHT: NA	DROP: NA	RESPONSIBLE PROFESSIONAL: Steve Barnett, LG	REG. NO. 1051

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					AGGREGATE BASE (GP): Light grayish brown, moist, gravel with sand and silt (roadbase FILL) (no odor)	Bagged Samples Sheen Testing Results:
2				1.3		no sheen
3						
4					POORLY-GRADED SAND with SILT (SP-SM): Brown, moist, 75% fine to medium SAND with 15% silt and 10% gravel (slight odor)	
5				5.1		no sheen
6				5.8	POORLY-GRADED SAND (SP): Light grayish brown, moist, 85% fine to medium SAND with 10% gravel and 5% coarse sand (no odor)	slight sheen
7						
8				3.5		no sheen
9						
10					coarse sand content increases	
11						
12				1.0		no sheen
13						
14				1.7		no sheen
15						
16				1.9	POORLY-GRADED SAND (SP): Light brown, moist, 80% medium to coarse SAND, with 10% fine sand and 10% gravel (no odor)	no sheen
17						
18						
19				1.6		no sheen
20						

PROJECT: Former J.H. Baxter
Arlington, Washington

Log of Boring No. SB-C (cont'd)

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
21	SB-C: 20 - 21			2.3		no sheen
22					grain size decreases to a fine to medium SAND	
23						
24				1.4		no sheen
25					grain size increases to a medium to coarse SAND	
26				3.5	gravel lense	no sheen
27						
28				6.2	gravelly, medium to coarse SAND lense	
29					POORLY-GRADED SAND with SILT (SP-SM): Light brown, moist, 90% fine SAND, with 10% silt (no odor)	sheen with trace product droplets
30				4.0	becomes wet	no sheen
31	SB-C: 30 - 33				lense containing 10% coarse sand and 10% gravel	
32				5.9		no sheen
33						
34						
35				3.7		no sheen
36				2.3		no sheen
37						
38						
39				1.4		no sheen
40						
41					Boring terminated at 40 feet and backfilled with bentonite chips.	
42						
43						
44						

OAKBOREV (REV. 8/2011)

PROJECT: Former J.H. Baxter Arlington, Washington		**Log of Boring No. SB-D**	
BORING LOCATION:		ELEVATION AND DATUM:	
DRILLING CONTRACTOR: Cascade Drilling, Inc.		DATE STARTED: 9/20/13	DATE FINISHED: 9/20/13
DRILLING METHOD: Sonic drilling		TOTAL DEPTH (ft.): 40.0	MEASURING POINT:
DRILLING EQUIPMENT: Prosonic, Spider Track Mounted Limited Access Rig		DEPTH TO WATER (ft.)	FIRST – 30 ft / COMPL.
SAMPLING METHOD: 5-foot-continuous-core system [5' x 4" OD]		LOGGED BY: Nathan Moxley	
HAMMER WEIGHT: NA	DROP: NA	RESPONSIBLE PROFESSIONAL: Steve Barnett, LG	REG. NO. 1051

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					AGGREGATE BASE (GP): Light grayish brown, moist, gravel with sand and silt (roadbase FILL) (no odor)	Bagged Samples Sheen Testing Results:
2				2.4	POORLY-GRADED SAND (SP): Light grayish brown, moist, 90% fine to medium SAND with 5% coarse sand and 5% gravel (no odor)	no sheen
3					dark brown color	
4				1.5		no sheen
5						
6				1.5		no sheen
7						
8				2.1		no sheen
9						
10					POORLY-GRADED SAND with GRAVEL (SP): Light grayish brown, moist, 60% medium to coarse SAND with 30% gravel and 10% fine sand (no odor)	
11				2.8	POORLY-GRADED SAND (SP): Light grayish brown, moist, 90% fine to medium SAND with 10% gravel (no odor)	no sheen
12						
13						
14				1.8		no sheen
15						
16				3.1		no sheen
17					POORLY-GRADED SAND with GRAVEL (SP): Light grayish brown, moist, 60% medium to coarse SAND with 30% gravel and 10% fine sand (no odor)	
18				3		no sheen
19						
20						

PROJECT: Former J.H. Baxter
Arlington, Washington

Log of Boring No. SB-D (cont'd)

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
21				2.8	POORLY-GRADED SAND (SP): Light grayish brown, moist, 90% fine to medium SAND with 10% gravel (no odor)	no sheen
22						
23						
24				3.3		no sheen
25						
26				3.4		no sheen
27					POORLY-GRADED SAND with GRAVEL (SP): Light grayish brown, moist, 60% medium to coarse SAND with 30% gravel and 10% fine sand (odor and staining)	
28				21.4		slight sheen
29						
30				17.7	POORLY-GRADED SAND with SILT (SP-SM): Light brown, moist to wet, 90% fine to medium SAND with 10% silt (strong odor) visible product in soil core from 30 - 34 ft	sheen and product droplets
31	SB-D: 30 - 33					
32				17.1		heavy sheen and free product
33						
34					odor decreases below 34 ft	
35				4.6		slight sheen
36				2.7		no sheen
37						
38				3.0		
39						
40				1.7		no sheen
41					Boring terminated at 40 feet and backfilled with bentonite chips.	
42						
43						
44						

PROJECT: Former J.H. Baxter Arlington, Washington	**Log of Boring No. SB-A**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/20/13 / DATE FINISHED: 9/20/13
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 45.0 / MEASURING POINT:
DRILLING EQUIPMENT: Prosonic, Spider Track Mounted Limited Access Rig	DEPTH TO WATER (ft.) FIRST – 30 ft / COMPL.
SAMPLING METHOD: 5-foot-continuous-core system [5' x 4" OD]	LOGGED BY: Nathan Moxley
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: Steve Barnett, LG / REG. NO. 1051

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					AGGREGATE BASE (GP): Light grayish brown, moist, gravel with sand and silt (roadbase FILL) (no odor)	Bagged Samples Sheen Testing Results:
2				0.5		no sheen
3						
4						
5				0.4		no sheen
6					WOOD DEBRIS: Dark brown to black, moist, 95% WOOD DEBRIS, 5% fine sand (faint odor)	
7				5.2		no sheen
8						
9					rock fragment	
10	SB-A: 10 - 11			2.1		no sheen
11						
12				0.0		no sheen
13						
14				0.1		no sheen
15					POORLY-GRADED GRAVEL (GP): Gray, rounded cobble fragments	
16				10.1	POORLY-GRADED SAND with GRAVEL (SP): Gray, moist, 80% medium to coarse SAND with 15% rounded gravel, and 5% fine sand (odor)	abundant sheen with product droplets
17	SB-A: 16 - 19					
18				15.6		slight sheen
19					POORLY-GRADED SAND (SP): Light brown, moist, 85% fine to medium SAND with 10% coarse sand and 5% gravel (slight odor)	
20						

PROJECT: Former J.H. Baxter
Arlington, Washington

Log of Boring No. SB-A (cont'd)

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
21				5.6	WOOD DEBRIS: Dark brown to black, moist, 95% WOOD DEBRIS, 5% fine sand (faint odor)	abundant sheen with product droplets
22				1.8	Gray, silty, fine SAND lense	
23					POORLY-GRADED SAND with GRAVEL (SP): Gray, moist, 75% medium to coarse SAND with 15% rounded gravel, 5% fine sand, and 5% wood debris (odor and staining)	no sheen
24	SB-A: 24 - 27				POORLY-GRADED SAND (SP): Grayish brown, moist, 90% fine to medium SAND with 5% coarse sand and 5% gravel (odor and staining)	
25				15.8		abundant sheen with product droplets
26				16.0		abundant sheen with product droplets
27						
28						
29				19.0	POORLY-GRADED SAND with SILT (SP-SM): Light brown, moist, 85% fine SAND with 10% silt and 5% gravel (odor and staining)	abundant sheen with product droplets
30					becomes wet	
31	SB-A: 30 - 33			22.8		free product visible
32						
33				16.1	residual free product visible in core bag at 33 ft	free product visible
34						
35						slight sheen
36				0.1		no sheen
37						
38						
39				0.5		
40	SB-A: 40 - 41					no sheen
41				0.3		
42						no sheen
43						
44						

OAKBOREV (REV. 8/2011)

PROJECT: Former J.H. Baxter
Arlington, Washington

Log of Boring No. SB-A (cont'd)

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
45				0.0		no sheen
46					Boring terminated at 45 feet and backfilled with bentonite chips	
47						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						

PROJECT: Former J.H. Baxter Arlington, Washington	**Log of Boring No. SB-B**	
BORING LOCATION:	ELEVATION AND DATUM:	
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/20/13	DATE FINISHED: 9/20/13
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 40.0	MEASURING POINT:
DRILLING EQUIPMENT: Prosonic, Spider Track Mounted Limited Access Rig	DEPTH TO WATER (ft.) FIRST ~ 30 ft	COMPL.
SAMPLING METHOD: 5-foot-continuous-core system [5' x 4" OD]	LOGGED BY: Nathan Moxley	
HAMMER WEIGHT: NA DROP: NA	RESPONSIBLE PROFESSIONAL: Steve Barnett, LG	REG. NO. 1051

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					AGGREGATE BASE (GP): Light grayish brown, moist, gravel with sand and silt (roadbase FILL) (no odor)	Bagged Samples Sheen Testing Results:
2				2.1		no sheen
3						
4					WOOD DEBRIS: Dark brown to black, moist, 95% WOOD DEBRIS, 5% fine sand (faint odor)	
5				1.6	POORLY-GRADED SAND (SP): Light grayish brown, moist, 90% fine to medium SAND with 5% silt and 5% gravel (no odor)	no sheen
6				3.3	POORLY-GRADED SAND (SP): Light grayish brown with reddish gray and gray staining, moist, 60% medium to coarse SAND with 30% fine sand and 10% gravel (slight odor)	slight sheen
7						
8						
9				1.4		no sheen
10					POORLY-GRADED SAND with GRAVEL (SP): Light grayish brown with dark gray staining, moist, 65% medium to coarse SAND with 25% gravel and 10% fine sand (no odor)	
11				6.8		no sheen
12						
13						
14				2.0		no sheen
15						
16				1.1	contains rounded cobbles	no sheen
17						
18	SB-B: 18 - 20					
19				0.6		no sheen
20						

PROJECT: Former J.H. Baxter
Arlington, Washington

Log of Boring No. SB-B (cont'd)

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
21					POORLY-GRADED SAND (SP): Light brown with gray staining, moist, 80% fine to medium SAND, with 10% coarse sand and 10% gravel (slight odor)	
22				2.4		no sheen
23						
24				1.2		no sheen
25					no staining visible	
26				3.0		slight sheen
27						
28					general grain size decreases to 95% fine to medium SAND with 5% gravel	
29				2.6		no sheen
30						
31				15.9	free product visible inside core bag	abundant sheen with product droplets
32						
33				15.4		free product visible
34					POORLY-GRADED SAND with SILT (SP-SM): Light brown, wet, 85% fine SAND with 15% silt (odor)	
35						
36				5.5		slight sheen
37						
38						
39				2.8		no sheen
40						
41					Boring terminated at 40 feet and backfilled with bentonite chips.	
42						
43						
44						

PROJECT: Former J.H. Baxter Arlington, Washington		**Log of Boring No. SB-C**	
BORING LOCATION:		ELEVATION AND DATUM:	
DRILLING CONTRACTOR: Cascade Drilling, Inc.		DATE STARTED: 9/20/13	DATE FINISHED: 9/20/13
DRILLING METHOD: Sonic drilling		TOTAL DEPTH (ft.): 40.0	MEASURING POINT:
DRILLING EQUIPMENT: Prosonic, Spider Track Mounted Limited Access Rig		DEPTH TO WATER (ft.)	FIRST ~ 30 ft / COMPL.
SAMPLING METHOD: 5-foot-continuous-core system [5" x 4" OD]		LOGGED BY: Nathan Moxley	
HAMMER WEIGHT: NA	DROP: NA	RESPONSIBLE PROFESSIONAL: Steve Barnett, LG	REG. NO. 1051

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					AGGREGATE BASE (GP): Light grayish brown, moist, gravel with sand and silt (roadbase FILL) (no odor)	Bagged Samples Sheen Testing Results:
2				1.3		no sheen
3						
4					POORLY-GRADED SAND with SILT (SP-SM): Brown, moist, 75% fine to medium SAND with 15% silt and 10% gravel (slight odor)	
5				5.1		no sheen
6				5.8	POORLY-GRADED SAND (SP): Light grayish brown, moist, 85% fine to medium SAND with 10% gravel and 5% coarse sand (no odor)	slight sheen
7						
8						
9				3.5		no sheen
10					coarse sand content increases	
11						
12				1.0		no sheen
13						
14				1.7		no sheen
15						
16				1.9		no sheen
17					POORLY-GRADED SAND (SP): Light brown, moist, 80% medium to coarse SAND, with 10% fine sand and 10% gravel (no odor)	
18						
19				1.6		no sheen
20						

PROJECT: Former J.H. Baxter
Arlington, Washington

Log of Boring No. SB-C (cont'd)

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
21	SB-C: 20 - 21			2.3		no sheen
22					grain size decreases to a fine to medium SAND	
23						
24				1.4		no sheen
25					grain size increases to a medium to coarse SAND	
26				3.5	gravel lense	no sheen
27						
28				6.2	gravelly, medium to coarse SAND lense	
29					POORLY-GRADED SAND with SILT (SP-SM): Light brown, moist, 90% fine SAND, with 10% silt (no odor)	sheen with trace product droplets
30				4.0	becomes wet	no sheen
31	SB-C: 30 - 33				lense containing 10% coarse sand and 10% gravel	
32				5.9		no sheen
33						
34						
35				3.7		no sheen
36				2.3		no sheen
37						
38						
39				1.4		no sheen
40						
41					Boring terminated at 40 feet and backfilled with bentonite chips.	
42						
43						
44						

OAKBOREV (REV. 8/2011)

PROJECT: Former J.H. Baxter Arlington, Washington	**Log of Boring No. SB-D**		
BORING LOCATION:	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/20/13	DATE FINISHED: 9/20/13	
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 40.0	MEASURING POINT:	
DRILLING EQUIPMENT: Prosonic, Spider Track Mounted Limited Access Rig	DEPTH TO WATER (ft.)	FIRST ~ 30 ft	COMPL.
SAMPLING METHOD: 5-foot-continuous-core system [5' x 4" OD]	LOGGED BY: Nathan Moxley		
HAMMER WEIGHT: NA DROP: NA	RESPONSIBLE PROFESSIONAL: Steve Barnett, LG		REG. NO. 1051

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					AGGREGATE BASE (GP): Light grayish brown, moist, gravel with sand and silt (roadbase FILL) (no odor)	Bagged Samples Sheen Testing Results:
2				2.4	POORLY-GRADED SAND (SP): Light grayish brown, moist, 90% fine to medium SAND with 5% coarse sand and 5% gravel (no odor)	no sheen
3					dark brown color	
4				1.5		no sheen
5						
6				1.5		no sheen
7						
8				2.1		no sheen
9					POORLY-GRADED SAND with GRAVEL (SP): Light grayish brown, moist, 60% medium to coarse SAND with 30% gravel and 10% fine sand (no odor)	
10						
11				2.8	POORLY-GRADED SAND (SP): Light grayish brown, moist, 90% fine to medium SAND with 10% gravel (no odor)	no sheen
12						
13						
14				1.8		no sheen
15						
16				3.1		no sheen
17					POORLY-GRADED SAND with GRAVEL (SP): Light grayish brown, moist, 60% medium to coarse SAND with 30% gravel and 10% fine sand (no odor)	
18				3		no sheen
19						
20						

PROJECT: Former J.H. Baxter
Arlington, Washington

Log of Boring No. SB-D (cont'd)

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
21				2.8	POORLY-GRADED SAND (SP): Light grayish brown, moist, 90% fine to medium SAND with 10% gravel (no odor)	no sheen
22						
23						
24				3.3		no sheen
25						
26				3.4		no sheen
27					POORLY-GRADED SAND with GRAVEL (SP): Light grayish brown, moist, 60% medium to coarse SAND with 30% gravel and 10% fine sand (odor and staining)	
28				21.4		slight sheen
29						
30	SB-D: 30 - 33			17.7	POORLY-GRADED SAND with SILT (SP-SM): Light brown, moist to wet, 90% fine to medium SAND with 10% silt (strong odor) visible product in soil core from 30 - 34 ft	sheen and product droplets
31						
32				17.1		heavy sheen and free product
33						
34					odor decreases below 34 ft	
35				4.6		slight sheen
36				2.7		no sheen
37						
38				3.0		
39						
40				1.7		no sheen
41					Boring terminated at 40 feet and backfilled with bentonite chips.	
42						
43						
44						